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15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED,

For the Year 1863.

Printed and Published by Order of the Honourable the Commissioners of Patents,

UNDER THE

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CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED.

COLLYER. 1st January 1863.	1. ROBERT HANHAM COLLYER, of Beta House, 8, Alpha Road, Regent's Park, in the County of Middlesex, M.D., F.C.S., for an invention for—"Improvements in the method of and apparatus for preparing materials for the manufacture of paper and similar purposes, part of the invention being also applicable to other operations in which materials are subjected to the action of hot agents." *Letters Patent sealed.*
BROWN. 1st January 1863.	2. WILLIAM HENRY BROWN, of Sheffield, in the County of York, Iron Master and Steel Manufacturer, for an invention for—"Improvements in battery plates." *Provisional protection only.*
ALLCROFT. 1st January 1863.	3. GEORGE ALLCROFT, of New Church Row, Camberwell, in the County of Surrey, for an invention for—"Improvements in pressure gauges and vacuum gauges." *Provisional protection only.*
BOWRA. FRANCIS. 1st January 1863.	4. MATTHIAS EDWARD BOWRA, of Upper Norwood, in the County of Surrey, Manufacturer, and ARTHUR EDWARD FRANCIS, of No. 10, Tokenhouse Yard, in the City of London, Gentleman, for an invention for—"Improvements in the manufacture of elastic fabrics." *Letters Patent sealed.*
SMITH. 1st January 1863.	5. JOHN THOMAS SMITH, of Lee, in the County of Kent, Gentleman, for an invention for—"Improvements in obtaining motive-power from steam and the products of combustion." *Provisional protection only.*
FAULDS. 1st January 1863.	6. ROBERT FAULDS, of Glasgow, in the County of Lanark, North Britain, Waggon Builder and Smith, for an invention for—"Improvements in traction engines or common road locomotives." *Provisional protection only.*
SOUTHGATE. 1st January 1863.	7. JOSHUA JOSEPH SOUTHGATE, of Kensington, in the County of Middlesex, Builder, for an invention for—"Improved arrangements for portable fire escapes." *Letters Patent sealed.*
JONES. 1st January 1863.	8. JAMES JONES, Manager, of Rhodes, near Middleton, in the County of Lancaster, for an invention for—"Improvements in finishing or stiffening textile fabrics." *Letters Patent sealed.*
SOUTTER. 1st January 1863.	9. WILLIAM SOUTTER, Coppersmith, of Birmingham, in the County of Warwick, for an invention for—"Certain apparatus for raising and planishing metals." *Letters Patent sealed.*
ROBINSON. 1st January 1863.	10. WILLIAM ROBINSON, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in glasses for lamps used in ships, railway carriages, and for other like purposes." *Letters Patent sealed.*
BAKER. LANDON. 1st January 1863.	11. JOHN EDWARD BAKER, of Cheapside, in the City of London, Boot Maker, and JAMES LANDON, of Crosskey Square, Little Britain, in the City of London, Boot Maker, for an invention for—"Improvements in the construction of boots, shoes and other coverings for the feet." *Letters Patent sealed and Specification filed by order.*
DISTIN. 2nd January 1863.	12. WILLIAM ALFRED DISTIN, of Tavistock Row, Covent Garden, in the County of Middlesex, for an invention for—"Improvements in pipes for smoking tobacco or other herbaceous compounds." *Letters Patent sealed.*
BAKEWELL. 2nd January 1863.	13. FREDERICK COLLIER BAKEWELL, of No. 6, Haverstock Terrace, Hampstead, in the County of Middlesex, for an invention for—"Improvements in apparatus for burning oils and other inflammable fluids as fuel."—*A communication to him from abroad by Augustus Theodore Schmidt, of Pittsburgh, in the State of Pennsylvania, North America.* *Letters Patent sealed and Specification filed by order.*

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EYLAND.
2nd January 1863.

14. CHARLES EYLAND, of Walsall, in the County of Stafford, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of buckles." *Provisional protection only.*

LYON.
2nd January 1863.

15. HENRY LYON, late of Baltimore, State of Maryland, United States of America, now of 31, Sidney Street, Commercial Road, London, Cigar Manufacturer, for an invention for—"Improvements in the finish and mode of packing cigars and in apparatus used for these purposes." *Provisional protection only.*

BAMFORD.
BLOMLEY.
TAYLOR.
LETT.
2nd January 1863.

16. ABRAHAM BAMFORD, of Belle-flat Street, Richard Street, RICHARD BLOMLEY, of Taylor Street, Whitworth Road, and ROBERT TAYLOR, No. 67, Manchester Road, Overlookers of Looms, and JAMES LETT, of No. 9, Water Street, Moulder, all of Rochdale, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HUGHES.
2nd January 1863.

17. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in producing designs upon velvets, cloth, furniture hangings and similar materials."—*A communication to him from abroad by Alphonse Eymin and Jean Marie Tourres, of Vienne (Sière), in the Empire of France.* *Provisional protection only.*

MUNTZ.
2nd January 1863.

18. WILLIAM HENRY MUNTZ, of Milbrook, in the County of Hants, for an invention for—"An improved method of attaching sheathing to iron or other vessels." *Letters Patent sealed.*

SERGEANT.
2nd January 1863.

19. HENRY JOHN SERGEANT, of Manchester, in the County of Lancaster, Silk Finisher, for an invention for—"Certain improvements in the method of dressing and finishing silk fabrics, and fabrics composed of silk, cotton and wool." *Letters Patent sealed.*

DOWSON.
2nd January 1863.

20. JOSEPH EMERSON DOWSON, of 38, Dowgate Hill, Thames Street, in the City of London, for an invention for—"Improvements in the manufacture of wrought metal piles, columns and shafts." *Letters Patent sealed.*

RANSOME.
2nd January 1863.

21. ROBERT CHARLES RANSOME, of Ipswich, in the County of Suffolk, Agricultural Engineer, for an invention for—"Improvements in reaping machines."—*A communication to him from abroad by Stanislaus Lilpop, a person resident at Warsaw.* *Letters Patent sealed.*

BOLTON.
2nd January 1863.

22. ALFRED SOHIER BOLTON, of the firm of Thomas Bolton and Sons, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in the manufacture of wire." *Letters Patent sealed.*

JONES.
3rd January 1863.

23. HARRY JONES, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in steam-engines." *Provisional protection only.*

SKULL.
MEALING.
3rd January 1863.

24. EDWIN SKULL, of High Wycombe, in the County of Bucks, Manufacturer, and EDWIN MEALING, of the same place, Chair Maker, for an invention for—"Improvements in chairs and other seats or apparatus for sitting or reclining on, which improvements are also applicable to tables." *Letters Patent sealed.*

PHILIPPI.
3rd January 1863.

25. WILLIAM PHILIPPI, of the Iron Works, at Stromberg, in the Kingdom of Prussia, for an invention for—"Improvements in the manufacture of bearings and axle boxes for machinery, carriages and railway rolling stock." *Letters Patent sealed.*

WHITE.
3rd January 1863.

26. STEPHEN WHITE, of Suffolk Grove, Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in the method of and apparatus for purifying, bleaching and refining oils, and oily and fatty matters." *Letters Patent sealed.*

ASTROP.
3rd January 1863.

27. WILLIAM ASTROP, of Jubilee Street, Stepney, in the County of Middlesex, Stationer, for an invention for—"Improvements in the manufacture of paper." *Letters Patent sealed.*

CLOUGH.
3rd January 1863.

28. CHARLES BUTLER CLOUGH, of Llwyn Offa, Mold, in the County of Flint, Esquire, for an invention for—"Improvements in apparatus for curing smoky chimneys." *Letters Patent sealed.*

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TOLSON. BROWN. 3rd January 1863.

29. WILLIAM TOLSON, Smallware Manufacturer, of Fazeley, in the County of Stafford, and CHARLES BROWN, Weaver, also of Fazeley, aforesaid, for an invention for—"Certain improvements in treating or covering strip steel or other suitable material for the making of crinoline skirts and other similar purposes for which the same may be applicable, and which same treatment or covering may be used for trimming or strengthening certain parts of ladies' dresses."
Provisional protection only.

NEWTON. 3rd January 1863.

30. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of firing or discharging cannon and other fire-arms, a part of which invention is applicable generally to the firing of charges of powder."—*A communication to him from abroad by George Washington Beardslee and Frederick Edwards Beardslee, of College Point, State of New York, United States of America.* *Letters Patent sealed.*

KEELING. 5th January 1863.

31. ENOCH BASSETT KEELING, of Gray's Inn, in the County of Middlesex, Architect, for an invention for—"An improvement in lighting halls, theatres and other buildings."
Letters Patent sealed.

YATES. 5th January 1863.

32. HENRY YATES, of Birmingham, in the County of Warwick, Edge Tool Manufacturer, for an invention for—"Improvements in machinery used in the manufacture of shovels and spades, and for raising and shaping metals for other purposes."
Provisional protection only.

COOPER. 5th January 1863.

33. JOHN ALEXANDER COOPER, of Trowbridge, in the County of Wilts, Gentleman, for an invention for—"The application of a fibre obtained from a certain plant as a substitute or to be used with silk, cotton, flax and such like materials, which fibre has not hitherto been applied to any of those purposes, and for certain methods of preparing the same for such purposes."
Provisional protection only.

HOWARD. BULLOUGH. 5th January 1863.

34. JOHN HOWARD, and JOHN BULLOUGH, of Accrington, in the County of Lancaster, Iron Founders and Machine Makers, for an invention for—"Improvements in warping or beaming machines."
Letters Patent sealed.

BLACKTIN. 5th January 1863.

35. HENRY BLACKTIN, of Bradford, in the County of York, Saw Maker and Ironmonger, for an invention for—"Improvements in means or apparatus for saving or preserving money, papers or other valuable property at sea in case of shipwreck."—*A communication to him from abroad by Charles Blacktin, of Mill Town, Saint Stephen's, New Brunswick, America.* *Provisional protection only.*

MONNET. 5th January 1863.

36. ANTOINE MONNET, of No. 5, Rue de la Platière, Lyon (Rhone), in the Empire of France, for an invention for—"Improvements in twisting and throwing silk and other fibres."
Provisional protection only.

BESSEMER. 5th January 1863.

37. HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in the construction and mode of working apparatus to be employed in pressing, moulding, shaping, embossing, crushing, shearing and cutting metallic and other substances."
Letters Patent sealed.

CHAMBERLAIN. 5th January 1863.

38. HUMPHREY CHAMBERLAIN, of Langley Fawley, in the County of Hants, Engineer, for an invention for—"Improvements in generating and condensing steam and evaporating liquids, and in the apparatus employed therein."
Letters Patent sealed.

NEVIN. COPPIN. 5th January 1863.

39. DAVID NEVIN, and WILLIAM COPPIN, of Londonderry, Ireland, for an invention for—"Improvements in machinery for clearing and separating the woody parts from the fibrous portion of flax, hemp or other like material."
Letters Patent sealed.

MUNN. COBB. 6th January 1863.

40. JOSEPH ALVIN MUNN, and JONATHAN DARWIN COBB, of No. 8, Gresham Street, in the City of London, Merchants, for an invention for—"Improvements in automatic walking dolls and other figures."—*A communication to them from abroad by John Bently Munn, of Montclair, New Jersey, United States.*
Provisional protection only.

NEWTON. 6th January 1863.

41. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in magneto-electric telegraphs."—*A communication to him from abroad by George Washington Beardslee, of College Point, State of New York, United States of America.*
Letters Patent sealed.

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JUDKINS. 6th January 1863.	**42.** CHARLES TIOT JUDKINS, of No. 22, Ludgate Street, in the City of London, Sewing Machine Manufacturer, for an invention for—"New alloys."—*A communication to him from abroad by Moses Gerrish Farmer, of Salem, Massachusetts, United States of America.* *Letters Patent sealed.*
ECKERSLEY. 6th January 1863.	**43.** JAMES ECKERSLEY, of Westhoughton, in the County of Lancaster, Mechanic, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*
LEIGH. 6th January 1863.	**44.** JOHN LEIGH, of the City of Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the treatment of gas produced by the distillation of coal, cannel, bituminous shale, boghead, mineral oils, petroleum or other combustible substances, and for the obtaining of certain products therefrom." *Letters Patent sealed.*
VICARS. ASHMORE. 6th January 1863.	**45.** THOMAS VICARS, the elder, THOMAS VICARS, the younger, and THOMAS ASHMORE, all of Seel Street, Liverpool, in the County of Lancaster, Engineers, for an invention for—"Improvements in machinery for manufacturing bread, biscuits and other like articles." *Provisional protection only.*
KNIGHT. 6th January 1863.	**46.** JOHN ADAMS KNIGHT, of No. 4, Symond's Inn, Chancery Lane, in the County of Middlesex, American Law Agent, for an invention for—"Improvements in printing presses."—*A communication to him from abroad by Nathaniel Knight, of Auburn, State of Maine, United States of America.* *Provisional protection only.*
HODGART. 6th January 1863.	**47.** MATTHEW HODGART, of Paisley, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in presses for pressing cotton and other substances."—*A communication to him from abroad by John Hodgart, residing at Colaba, Bombay.* *Letters Patent sealed.*
GARDNER. 6th January 1863.	**48.** EDWARD VINCENT GARDNER, of Berners Street, in the County of Middlesex, Professor of Chemistry, for an invention for—"Improvements in the treatment of petroleum and mineral oils, and in apparatus employed therein." *Letters Patent sealed.*
DAHLKE. 6th January 1863.	**49.** JULIUS GUSTAV DAHLKE, of Batterses, in the County of Surrey, for an invention for—"Improvements in machinery for cutting clay in the manufacture of bricks, tiles and similar articles."—*A communication to him from abroad by Gottfried Sachsenberg, of Rosslau, Germany.* *Letters Patent sealed.*
TURNER. 6th January 1863.	**50.** GEORGE TURNER, Shoe Manufacturer, of Campbell Square, Northampton, for an invention for—"A new method of making leather from waste pieces of common leather." *Letters Patent sealed.*
WHITWORTH. HULSE. 6th January 1863.	**51.** JOSEPH WHITWORTH, and WILLIAM WILSON HULSE, of the City of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in ordnance." *Letters Patent sealed.*
JOHNSON. 6th January 1863.	**52.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in rocket torpedos, and in the apparatus for directing the flight of the same under water."—*A communication to him from abroad by Rufus Waples and Pascal Plant, both of the City of Washington, in the District of Columbia, in the United States of America.* *Provisional protection only.*
NEALE. 7th January 1863.	**53.** JOHN NEALE, of No. 11, King's Road, Ball's Pond, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of capsules."—*A communication to him from abroad by Emile Barrault, of 33, Boulevard St. Martin, Paris, in the Empire of France.* *Provisional protection only.*
CASHIN. 7th January 1863.	**54.** THOMAS FREDERICK CASHIN, of Sheffield, in the County of York, Civil Engineer, for an invention for—"Improvements in covering wire, crinoline steel, or hoops for skirts." *Provisional protection only.*
CRABTREE. CROWTHER. 7th January 1863.	**55.** WILLIAM CRABTREE, of Newton Green, near Todmorden, in the County of York, Manufacturer, and JAMES CROWTHER, of the same place, Weaver, for an invention for—"An improved mode of perching and dressing textile fabrics during the process of weaving." *Provisional protection only.*

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BRUCE.
7th January 1863.

56. WILLIAM SQUIRE BRUCE, of Great Saint Helen's, Bishopsgate Street, in the County of Middlesex, for an invention for—"Improvements in lucifer matches, fusees and other similar lights, and in the boxes or holders for containing the same."—*A communication to him from abroad by Thomas Jordery, of Paris, in the Empire of France.* *Provisional protection only.*

STOREY.
7th January 1863.

57. THOMAS STOREY, of the Firm of Storey, Brothers and Company, Manufacturers of Oil and Leather Cloth, of the Town and County of Lancaster, for an invention for—"Improvements in compound waterproof and ornamental fabrics." *Provisional protection only.*

CLARK.
7th January 1863.

58. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improved media for advertising."—*A communication to him from abroad by Antoine Masson, of 29, Boulevart St. Martin, Paris, Artist.* *Provisional protection only.*

GRIMES.
7th January 1863.

59. GEORGE CHARLES GRIMES, of No. 8, Wandle Terrace, South Street, Wandsworth, in the County of Surrey, for an invention for—"Improvements in means or apparatus for treating splints used in the manufacture of matches and other lights." *Letters Patent sealed.*

HUDDART.
7th January 1863.

60. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Carnarvon, Gentleman, for an invention for—"Improvements in buttons." *Letters Patent sealed.*

AVELING.
7th January 1863.

61. THOMAS AVELING, of Rochester, in the County of Kent, Engineer, for an invention for—"Improvements in the construction of traction engines." *Letters Patent sealed.*

DOWLER.
7th January 1863.

62. GEORGE DOWLER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of match boxes." *Letters Patent sealed.*

BOUSFIELD.
7th January 1863.

63. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in skate fastenerr."—*A communication to him from abroad by Thomas Hope, a person resident at Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

HARBEN.
7th January 1863.

64. HENRY HARBEN, of Oxford Villa, Haverstock Hill, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of fibrous material for cleansing machinery and other purposes." *Provisional protection only.*

JOHNSON.
7th January 1863.

65. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the permanent way of railways."—*A communication to him from abroad by Alcide Louis Joseph Huber, of Paris, in the Empire of France.* *Letters Patent sealed.*

GROGAN.
8th January 1863.

66. RODERICK GROGAN, of 27, Hereford Road North, Bayswater, W., for an invention for—"New and improved propellers for vessels driven by steam or other power." *Provisional protection only.*

HULL.
8th January 1863.

67. LIVERAS HULL, of the State of Massachusetts, of the United States of America, for—"An invention having reference to the treatment of ground caoutchouc, and for the purpose of rendering it elastic or improving its elasticity, as well as imparting to such caoutchouc other useful properties." *Complete specification; Letters Patent sealed.*

GUILD.
8th January 1863.

68. ALEXANDER GUILD, of Dundee, Gentleman, for an invention for—"Improved machinery for breaking and cleaning flax, hemp and other fibre yielding plants.—*A communication to him from abroad by Gelston Sanford and James Edward Mallory, both of New York City, United States of America.* *Letters Patent sealed.*

ALLEN.
8th January 1863.

69. CECIL ALLEN, of Basinghall Street, in the City of London, Gentleman, for an invention for—"Improvements in apparatus for signalling on railways by detonating or explosive signals." *Letters Patent sealed.*

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MONTEITH. MONTEITH. 8th January 1863.

70. ROBERT THOMSON MONTEITH, of St. Malo, in the Empire of France, British Vice-Consul, and ROBERT MONTEITH, of N° 64, Crystal Terrace, Cecil Street, Greenheys, Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the manufacture of dyes from aniline and its analogues."—*A communication to them by Georges Auguste Jules Delvaux, residing at No. 37, Rue Corneille, Paris, in the Empire of France.* *Letters Patent sealed.*

PUNSHON. 9th January 1863.

71. JOHN PUNSHON, of Pemberton, near Wigan, in the County of Lancaster, Engineer, for an invention for—"Improved means or apparatus for preventing overwinding at colleries, and to provide extra breakage power to steam-engines." *Provisional protection only.*

WORSSAM. 9th January 1863.

72. CHARLES WORSSAM, of Commercial Wharf, Kingsland Road, in the County of Middlesex, Engineer, for an invention for—"An improved lithographic press." *Letters Patent sealed.*

TUCKER. 9th January 1863.

73. WALTER HENRY TUCKER, of 6, Southampton Street, Strand, in the County of Middlesex, for an invention for—"Improvements in locks and in the modes of connecting the knobs and spindles of the same." *Letters Patent sealed.*

THOMAS. 9th January 1863.

74. RICHARD THOMAS, of No. 70, Berners Street, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in apparatus for rendering hair wavy." *Provisional protection only.*

GRAY. 9th January 1863.

75. CARROLL EUGENE GRAY, of Great Suffolk Street, Borough, in the County of Surrey, for an invention for—"Improvements in wringing machines." *Letters Patent sealed.*

GOUPIL. 9th January 1863.

76. EDMOND ALFRED GOUPIL, of No. 10, Rue d'Hauteville, in the City of Paris, in the Empire of France, Gentleman, for an invention for—"An improved locomotive apparatus." *Provisional protection only.*

CARTWRIGHT. 9th January 1863.

77. MATTHEW CARTWRIGHT, of Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in alarums for portable and stationary uses." *Provisional protection only.*

PARSONS. 9th January 1863.

78. DAVID BALL PARSONS, formerly of Hoosick Falls, New York, in the United States of America, and now of No. 77, Upper Thames Street, in the City of London, for an invention of—"Improvements in reaping and mowing machines."—*The result partly of a communication from abroad made to him by Walter Abbott Wood, a person resident at Hoosick Falls, New York, in the United States of America, and partly of invention and discovery made by himself.* *Provisional protection only.*

HUGHES. 9th January 1863.

79. EDWARD THOMAS HUGHES, of the Firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in machinery or apparatus for printing or staining woven fabrics, warps, paper and other articles."—*A communication to him from abroad by Joseph Kien, of Lyons, in the Empire of France.* *Letters Patent sealed.*

COLLINGE. 9th January 1863.

80. DANIEL COLLINGE, of Oldham, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Improvements in machinery or apparatus for cleaning and preparing cotton or other fibrous materials to be spun." *Provisional protection only.*

MORELAND. CHAPPELL. 9th January 1863.

81. WILLIAM HARRISON MORELAND, and JOHN CHAPPELL, both of Loop Bridge Mill, near Belfast, in the Kingdom of Ireland, for an invention for—"Improvements in winding, warping, beaming or dressing machines." *Letters Patent sealed.*

PRICE. 9th January 1863.

82. GEORGE BROOKE PRICE, of Bedford, in the County of Bedford, Engineer, for an invention for—"Improvements in sights for fire-arms." *Provisional protection only.*

TASKER. 9th January 1863.

83. WILLIAM TASKER, the younger, of Waterloo Iron Works, near Andover, in the County of Hants, Engineer, for an invention for—"Improvements in the construction of harrows." *Letters Patent sealed.*

HENRY. 9th January 1863.

84. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in furnaces."—*A communication to him from abroad by Hyppolite Godard-Desmarest, of 33, Boulevard Saint Martin, Paris, France.* *Letters Patent sealed.*

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GROVE.
10th January 1863.

85. WILLIAM GROVE, of Tenbury, in the County of Worcestershire, for an invention for—"An improved apparatus applicable to the sawing and cutting of wood or other light substances." *Provisional protection only.*

GROVE.
10th January 1863.

86. WILLIAM GROVE, of Tenbury, in the County of Worcestershire, for an invention for—"Improvements in apparatus for sawing wood and other substances." *Provisional protection only.*

LÜTHY.
10th January 1863.

87. ROBERT LÜTHY, of Solothurn, in the Republic of Switzerland, and of No. 2, Thavies Inn, in the City of London, for an invention for—"Improvements in hydrostatic presses." *Letters Patent sealed.*

VOGL.
10th January 1863.

88. MAURICE VOGL, of Sambrook Court, Basinghall Street, in the City of London, Merchant, for an invention for—"An improved fastening for bags and other articles." *Letters Patent sealed.*

LEPREUX.
10th January 1863.

89. LOUIS HENRY EMMANUEL LEPREUX, of Bordeaux, France, for an invention for—"Improved plates or slabs for preserving apartments from the effects of damp, and which are also applicable in the composition of plinths and foundations for walls."—*A communication from François Jaffary, a person resident at Saint Médard de Guizières, France.* *Provisional protection only.*

FENTON.
10th January 1863.

90. FERRAR FENTON, of Mappleton, in the County of Derby, for an invention for—"Improvements in the manufacture of pulp for paper making and similar purposes." *Letters Patent sealed.*

POWERS.
DALE.
10th January 1863.

91. EDWARD POWERS, of Manchester, in the County of Lancaster, Chemist, and JOHN GALLEMORE DALE, of Warrington, in the said County, Chemist, for an invention for—"Improvements in the manufacture of caustic soda and potash, and carbonates, chromates and stannates of the same alkalis." *Provisional protection only.*

DAWSON.
12th January 1863.

92. DAN DAWSON, of Milnsbridge Chemical Works, Huddersfield, in the County of York, for an invention for—"Improvements in manufacturing 'magenta' colour or dye." *Letters Patent sealed.*

CHATTAWAY.
12th January 1863.

93. EDWIN DANIEL CHATTAWAY, of No. 1, New Broad Street, in the City of London, Civil Engineer, for an invention for—"Improvements in railway signals." *Provisional protection only.*

STEVENS.
12th January 1863.

94. EBENEZER STEVENS, of No. 139, Cheapside, in the City of London, for an invention for—"Improvements in ovens, hot plates and cooking apparatus." *Letters Patent sealed.*

CLARK.
12th January 1863.

95. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in winding or copping frames."—*A communication to him from abroad by Jean Jacques Bourcart, Engineer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

CLARK.
12th January 1863.

96. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in carding-engines."—*A communication to him from abroad by Jean Jacques Bourcart, Engineer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

CLARK.
12th January 1863.

97. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the preparation of green coloring matter."—*A communication to him from abroad by Charles Jules Usèbe, Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

MAHON.
12th January 1863.

98. ARTHUR IRWIN MAHON, of 25, Leinster Square, Rathmines, in the County of Dublin, C.E., for an invention for—"Improvements in screw and paddle propellers and a submarine propeller, also applicable to the raising and forcing of water or other fluids." *Provisional protection only.*

NEWTON.
12th January 1863.

99. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the application of power designed for stationary and traction engines, propellers and other machinery."—*A communication to him from abroad by Perry Dickson, of Utica, and William Ashley Jones, of Winona, both in the state of Minnesota, United States of America.* *Letters Patent sealed.*

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LEWIS. 13th January 1863.

100. THOMAS GEORGE LEWIS, of Cumberland Place, Newington Butts, in the County of Surrey, Perambulator Maker, for an invention for—"Improvements in apparatus applied to perambulators, invalid chairs and other carriages." *Provisional protection only.*

FENBY. 13th January 1863.

101. JOSEPH BEVERLEY FENBY, of Worcester, Gentleman, for an invention for—"A new or improved instrument or apparatus to be attached to pianofortes, organs and other similar keyed musical instruments, for printing the score of any music performed on the said instruments. *Letters Patent sealed.*

BOYLE. 13th January 1863.

102. THOMAS BOYLE, of Gray's Inn Terrace, Gray's Inn Lane, in the City of London, Glass Silverer, for an invention for—"A new apparatus for multiplying indefinitely the reflections of all objects that are capable of being viewed in it." *Provisional protection only.*

TANNAHILL. TANNAHILL. 13th January 1863.

103. DAVID TANNAHILL, and JOHN TANNAHILL, both of Glasgow, in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements in rivet making machinery. *Letters Patent sealed.*

PLATTS. BAILEY. 13th January 1863.

104. WILLIAM PLATTS, of Manchester, in the County of Lancaster, Merchant, and JOHN BAILEY, of the same place, Cotton Dealer, for an invention for—"Certain improvements in telegraphic cables." *Provisional protection only.*

STROUD. 13th January 1863.

105. JOHN THOMAS STROUD, Lamp and Chandelier Manufacturer, of Birmingham, in the County of Warwick, for an invention for—"Certain improvements in fixed and portable lights for domestic and other uses, applicable for burning gas and the mineral oils or spirits now so commonly used. *Letters Patent sealed.*

TOWNSEND. YOUNG. 13th January 1863.

106. CHARLES HENRY TOWNSEND, and JAMES YOUNG, both of the City of Bristol, Engineers, for an invention for—"Improved compositions for preventing incrustation and corrosion in steam-boilers and condensers." *Letters Patent sealed.*

BROOMAN. 13th January 1863.

107. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for lifting bobbins off spindles in spinning machines, and in lubricating spindles."—*A communication to him from abroad by Louis François Filleul and Dominique Jarriel, both of Guilbray, France.* *Letters Patent sealed.*

SOUTHWOOD. 13th January 1863.

108. WILLIAM SOUTHWOOD, of Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"Improvements in machinery for manufacturing nails or brads." *Provisional protection only.*

TILDESLEY. 13th January 1863.

109. MATTHEW TILDESLEY, of the Firm of John Harper and Company, of Willenhall, in the County of Stafford, Lock Manufacturers, for an invention for—"Improvements in the manufacture of padlocks and other locks and their keys." *Provisional protection only.*

AMOS. 13th January 1863.

110. CHARLES EDWARDS AMOS, of the Grove, in the Borough of Southwark, Engineer, for an invention for—"Improvements in machinery for the manufacture of paper." *Letters Patent sealed.*

LESCUYER. 13th January 1863.

111. LUCIEN LESCUYER, of Paris, 2, Carrefour de l'Observatoire, for an invention for—"Improvements in india-rubber over-shoes or goloshes." *Letters Patent sealed; no specification filed.*

BUTLER. 13th January 1863.

112. THOMAS BUTLER, Manager, in the employ of Messrs. Williams and Maxton, of Nottingham, Lace Manufacturers, for an invention for—"Improvements in the manufacture of lace in twist lace machines." *Provisional protection only.*

ROCK. 13th January 1863.

113. JOHN BOYLE ROCK, of the Parish of Pilton, near Barnstaple, in the County of Devon, for an invention for—"Improvements in apparatus for saving life and property from fire and other danger in buildings and mines." *Letters Patent sealed.*

BESSEMER. 13th January 1863.

114. HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in the manufacture and treatment of malleable iron and steel, and in furnaces, machinery and apparatus employed in such manufacture." *Letters Patent sealed.*

KIDD. 14th January 1863.

115. JOSHUA KIDD, of Cannon Row, in the City of Westminster, County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for measuring the quantity of gas supplied to single burners and increasing its illuminating power. *Provisional protection only.*

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PIDDING. 14th January 1863.

116. WILLIAM PIDDING, of Cole Street, Southwark, in the County of Surrey, Gentleman, for an invention for—"Improvements in the soles and heels of boots and shoes, in studs, nails, tips and toe or other plates used therewith, and in placing and securing them." *Provisional protection only.*

SCHLUMBERGER. 14th January 1863.

117. JULES ALBERT SCHLUMBERGER, of Bale, in the Republic of Switzerland, Manufacturing Chemist, for an invention for—"An improved process for manufacturing colours for dyeing and printing."—*A communication to him from abroad by Jean Jaques Muller, of Bale, Switzerland.* *Letters Patent sealed.*

BUTLER. 14th January 1863.

118. JOHN SANDERSON BUTLER, of Saint Alban's Terrace, in the Town and County of the Town of Nottingham, Lace Manufacturer, for an invention for—"Improvements in the manufacture of bobbin net made on bobbin net or twist lace machines." *Letters Patent sealed.*

BOUSFIELD. 14th January 1863.

119. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machinery for rolling, grinding and cutting files."—*A communication to him from abroad by William Picket Pierce, a person resident at Boston, Massachusetts, United States of America.* *Complete specification; Letters Patent sealed.*

BIDDELL. 14th January 1863.

120. GEORGE ARTHUR BIDDELL, of Ipswich, in the County of Suffolk, Mechanical Engineer, for an invention for—"Improvements in machines for pulping turnips and other vegetable substances. *Letters Patent sealed.*

BURROWS. 14th January 1863.

121. BENJAMIN BURROWS, of Leicester, for an invention for—"Improvements in looms used in weaving narrow fabrics." *Letters Patent sealed.*

LAWSON. 14th January 1863.

122. JOHN LAWSON, of Hope Foundry, Leeds, in the County of York, for an invention for—"Improvements in apparatus for holding castings and other pieces whilst being planed or shaped." *Letters Patent sealed.*

MOREWOOD. 14th January 1863.

123. EDMUND MOREWOOD, of Stratford, in the County of Essex, for an invention for—"Improvements in the manufacture of coated metallic sheets or plates and pieces, and in apparatus to be used therein." *Letters Patent sealed.*

HOLT. 14th January 1863.

124. GEORGE HOLT, of No. 5, Canterbury Place, Lambeth Road, in the County of Surrey, in the employ of Messrs. Hodges and Co., Distillers, Lambeth, for an invention for—"Improvements in apparatus for sweeping or cleaning chimneys, and also in apparatus for preventing chimneys from smoking." *Provisional protection only.*

WILKINSON. 14th January 1863.

125. THOMAS WILKINSON, of Scarborough, in the County of York, Engineer, for an invention for—"Improvements in the manufacture of tubular steam-boilers." *Letters Patent sealed.*

JOHNSON. 14th January 1863.

126. WILLIAM JOHNSON, of 166, Buchanan Street, Glasgow, in the County of Lanark, North Britain, Civil Engineer, for an invention for—"Improvements in the manufacture of chlorine and bleaching powder, carbonate of soda and soda ash, and sulphate of iron."—*A communication to him from abroad by Thomas Macfarlane, Metallurgical Chemist, of Acton Vale, in the County of Bagot, and Province of Canada.* *Letters Patent sealed.*

TURNER. 15th January 1863.

127. HENRY TURNER, of Leeds, in the County of York, Leather Strap Manufacturer, for an invention for—"Improvements in apparatus for preventing and curing blight, decay, disease and rot in potatoes. *Provisional protection only.*

HULSE. HAINES. 15th January 1863.

128. WILLIAM HULSE, and CAMPBELL LLOYD HAINES, of Birmingham, in the County of Warwick, Metallic Bedstead Manufacturers, for an invention for—"Improvements in machinery for the manufacture of taper metallic tubes." *Letters Patent sealed.*

HOWES. 15th January 1863.

129. EDWARD HOWES, of Birmingham, in the County of Warwick, Lamp Manufacturer, for an invention for—"Improvements in railway, ship and other lamps." *Letters Patent sealed; no specification filed.*

BARRACLOUGH. 15th January 1863.

130. THOMAS CRITCHLEY BARRACLOUGH, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for cutting metallic tubes or pipes, or tubes or pipes composed of other indurate substances."—*A communication to him from abroad by George Henry Sanborn, of Boston, U.S.A.* *Letters Patent sealed.*

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BARRACLOUGH. 15th January 1863.

131. THOMAS CRITCHLEY BARRACLOUGH, of Manchester, in the County of Lancaster, Engineer, for an invention for—"An improved alarum apparatus which may be employed in connection with locks or other fastenings."—*A communication to him from abroad by George Henry Sanborn, of Boston, U.S.A.* *Letters Patent sealed.*

HARROP. 15th January 1863.

132. JOHN HARROP, of Manchester, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the treatment of organic fecal and urinous matters for the purpose of deodorizing the same, and in the preparation of a portable manure therefrom, and in the treatment of ashes or other refuse of combustion to be combined therewith, also for improvements in machinery to be employed in the manufacture of the said manure." *Letters Patent sealed.*

GRAHAM. MCLEOD. 15th January 1863.

133. GEORGE GRAHAM, Manager of the Dalquhurn Turkey Red Dye Works, and JOHN MCLEOD, of Renton, Engineer, both places being in the County of Dumbarton, North Britain, for an invention for—"Improvements in apparatus to be used in turkey-red dyeing." *Letters Patent sealed.*

FERRIER. 15th January 1863.

134. ROBERT FERRIER, Gas Engineer, Edinburgh, in the County of Edinburgh, for an invention for—"Improvements in wet gas meters." *Letters Patent sealed.*

JOSSE. 15th January 1863.

135. LOUIS PIERRE JOSSE, of Paris, France, Gentleman, for an invention for—"An improved apparatus for cleansing wheat or other grain or seeds." *Letters Patent sealed.*

MURRELL. 15th January 1863.

136. CHARLES MURRELL, of Pinfold Street, Aylsham, in the County of Norfolk, Joiner, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

BATH. 15th January 1863.

137. JAMES PARKER BATH, of Aigburth, near Liverpool, in the County of Lancaster, Coach Proprietor, for an invention for—"Improvements applicable to omnibuses and other like carriages to adapt them for use on rail or tram roads as well as common highways." *Letters Patent sealed.*

WILLIAMS. 15th January 1863.

138. CHARLES HANSON GREVILLE WILLIAMS, of Rumford Street, Glasgow, for an invention for—"Improvements in the manufacture of colouring matters." *Provisional protection* NOT *granted.*

CHILD. 15th January 1863.

139. JOHN WRIGHT CHILD, of Halifax, in the County of York, Engineer, for an invention for—"Improvements in means or apparatus employed in spinning and weaving." *Letters Patent sealed.*

PRINCE. 15th January 1863.

140. ALEXANDER PRINCE, of 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

NEWTON. 15th January 1863.

141. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in microscopes."—*A communication to him from abroad by Conrad von Rappard, of Berne, Switzerland.* *Letters Patent sealed.*

LEBLANC. 15th January 1863.

142. DÉSIRÉ FRANÇOIS LEBLANC, of 3, Percy Street, Bedford Square, in the County of Middlesex, for an invention for—"A dioptical metallic level indicator or liquid gauge."—*A communication to him from abroad by Ferdinand Philippe Edouard Carré, Engineer, of Paris.* *Letters Patent sealed.*

BROOMAN. 15th January 1863.

143. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in looms or machinery for the manufacture of lace and other fabrics."—*A communication to him from abroad by Louis Plauche, Gustave Lafond, Désiré Sival, called Laserre, and Leon Sival, called Laserre, all of Paris, France.* *Letters Patent sealed.*

KERR. 16th January 1863.

144. JOHN KERR, of Manchester, in the County of Lancaster, Painter, for an invention for—"Certain improvements in the means of retarding or stopping railway and other carriages." *Provisional protection only.*

VERDURE. 16th January 1863.

145. LEWIS VERDURE, of Tournai, in the Kingdom of Belgium, Spinner, for an invention for—"Improved slubs or rovings (in flax, hemp and other filamentous materials) produced by the slubbing frame and destined for fine spinning, as also for improved apparatus employed therein." *Letters Patent sealed.*

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WINTER. GRAY. 16th January 1863.

146. JOHN GENO WINTER, and CARROLL EUGENE GRAY, both of Great Suffolk Street, Borough, in the County of Surrey, for an invention for—"Improvements in vessels in which to cool and transport fatty or oleaginous matters, such as tallow, lard, palm oil and the like." *Provisional protection* NOT *granted.*

MOEGLEN. 16th January 1863.

147. MARTIN MOEGLEN, of Cernay, in the French Empire, Mechanist, for an invention for—"Machinery for printing several colours in succession on the same surface." *Provisional protection only.*

LOYSEL. 16th January 1863.

148. EDWARD LOYSEL, of Cannon Street, in the City of London, Civil Engineer, for an invention for—"Improved apparatus for preserving valuable property, documents and letters, in cases of shipwreck." *Provisional protection only.*

SHORROCK. 17th January 1863.

149. WILLIAM SHORROCK, of Tockholes, near Blackburn, in the County of Lancaster, Manager, for an invention for—"Certain improvements in power-looms for weaving." *Provisional protection only.*

EDWARDS. 17th January 1863.

150. JOHN EDWARDS, of 29, Basinghall Street, in the City of London, for an invention for—"Improvements in the manufacture of buttons." *Letters Patent sealed.*

LIGHTFOOT. 17th January 1863.

151. JOHN LIGHTFOOT, of Accrington, in the County of Lancaster, Chemist, for an invention for—"Improvements in printing and dyeing textile fabrics and yarns." *Letters Patent sealed.*

ASHE. 17th January 1863.

152. ISAAC ASHE, of Birkenhead, in the County of Chester, Bachelor of Medicine, for an invention for—"Improvements in apparatus for preventing sea sickness." *Letters Patent sealed.*

COMBE. 17th January 1863.

153. JOHN COMBE, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in machinery for spreading, drawing and carding flax and other fibrous substances." *Letters Patent sealed.*

HAYCRAFT. 17th January 1863.

154. GEORGE HAYCRAFT, of 23, Lombard Street, in the City of London, for an invention for—"Improvements in powder flasks." *Letters Patent sealed.*

BOUSFIELD. 17th January 1863.

155. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in hot air engines."—*A communication to him from abroad by Elmer Townsend, a person resident at Boston, Massachusetts, United States of America.—Complete specification; Letters Patent sealed.*

NEWTON. 17th January 1863.

156. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of buttons."—*A communication to him from abroad by Pierre Labat, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

SABEL. 19th January 1863.

157. EPHRAIM SABEL, of Moorgate Street, in the City of London, Gentleman, for an invention for—"Improvements in the manufacture of artificial stone."—*A communication to him from abroad by Joseph Sepulchre, of Huy, in the Kingdom of Belgium, Cultivator.* *Letters Patent sealed.*

NORTON. 19th January 1863.

158. CHARLES NORTON, of 47, Hawley Road, N.W., in the County of Middlesex, for an invention for—"A new or improved method of roughing horses." *Provisional protection only.*

LAURIE. 19th January 1863.

159. JOHN LAURIE, of the City of Manchester, in the County of Lancaster, Agricultural Implement Maker, for an invention for—"Improvements in apparatus for churning milk and mixing liquid compounds." *Provisional protection only.*

BROOKE. 19th January 1863.

160. Sir WILLIAM O'SHAUGHNESSY BROOKE, of 107, Avenue des Champs Elysees, Paris, for an invention for—"Improvements in the manufacture of insulators for electric telegraphs." *Letters Patent sealed; no specification filed.*

RUSHTON. 19th January 1863.

161. HENRY RUSHTON, of Northampton Road, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in machinery for plaiting cotton thread or other fibrous material over steels for crinolines, and in the mode of securing the plaiting to prevent it slipping thereon." *Provisional protection only.*

BROOMAN. 19th January 1863.

162. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of sulphate of soda for conversion into soda and other uses."—*A communication to him from abroad by Germain Adolphe Thibierge, of Versailles, France.* *Letters Patent sealed.*

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HARRISON. 19th January 1863.

163. WILLIAM HENRY HARRISON, of Haverfordwest, for an invention for—"Improvements in covering wire and other iron articles for the purpose of protecting them from oxidation, and in the mode or method employed therein."
Provisional protection only.

LUNDY. 19th January 1863.

164. JOHN JAMES LUNDY, of Leith, in the County of Midlothian, North Britain, Colour Manufacturer, for an invention for—"Improvements in the manufacture of metallic casks and vessels."
Letters Patent sealed.

MARK. 19th January 1863.

165. BERTRAM VAN DER MARK, residing at No. 8, Great John Street, Manchester, for an invention for—"A new and improved musical instrument of the harmonica class."
Provisional protection only.

PAUL. 20th January 1863.

166. ALFRED PAUL, of the Parish of Gwennap, in the County of Cornwall, for an invention for—"Improvements in obtaining reciprocating motion in steam-engines, and for communicating the same to any ordinary pumps for whatever purpose they may be employed."
Provisional protection only.

MOSHEIMER. 20th January 1863.

167. JOSEPH MOSHEIMER, of Dolgelly, in the County of Merioneth, Wales, Gentleman, for an invention for—"Improvements in machinery for crushing and grinding quartz and other substances."
Letters Patent sealed.

BELL. SPEIGHT. 20th January 1863.

168. JOHN BELL, Foreman, and JOHN SPEIGHT, Fitter, both in the employ of Messieurs John Elce and Company, of the Phœnix Iron Works, Jersey Street, in the City of Manchester, for an invention for—"Certain improvements in the construction of carding-engines."
Provisional protection only.

MAWSON. WHITEHEAD. 20th January 1863.

169. WILLIAM MAWSON, and JAMES WHITEHEAD, both of Calverley, near Leeds, in the County of York, for an invention for—"Improved hydraulic machinery for raising water in mines, wells and other places."
Provisional protection only.

BONNEVILLE. 20th January 1863.

170. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of clocks."—*A communication from Tony Pocachard, Gentleman, a person now residing at 24, Rue du Mont Thabor, Paris, in the Empire of France.*
Provisional protection only.

BONNEVILLE. 20th January 1863.

171. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in coloring, bronzing and preserving iron and steel."—*A communication from Claude Joseph Thiraulf, Chemist, a person now residing at 24, Rue du Mont Thabor, Paris, in the Empire of France.*
Letters Patent sealed.

HENRY. 20th January 1863.

172. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for retarding and stopping railway carriages."—*A communication to him from abroad by Charles Fray, Vincent Paul Amédée Varenne, Louis Casimir Descouleur, and Sabin Joseph Cazier, all of 33, Boulevard St. Martin, Paris, France.*
Provisional protection only.

CLARK. 20th January 1863.

173. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in looms for weaving textile fabrics."—*A communication to him from abroad by Andrew Naudain, of the Town of West Farms, County of Westchester, and State of New York, James Peacock, of the Town of Morrisania, County of Westchester, and State of New York, and William Henry Walton, of the City, County and State of New York, in the United States of America.*
Letters Patent sealed.

SMITH. CHEASE. 20th January 1863.

174. JAMES SMITH, of Barkeley House, Seaforth, near Liverpool, in the County of Lancaster, and SYDNEY ARTHUR CHEASE, of Egremont, near Birkenhead, in the County of Chester, for an invention for—"A new description of motive-power engine."
Provisional protection only.

HUGHES. SANDERS. 20th January 1863.

175. HESKETH HUGHES, of Homerton, in the County of Middlesex, Engineer, and JAMES SANDERS, of Nottingham, Lace Manufacturer, for an invention for—"Improvements in machinery and apparatus for the manufacture of trimmings and cap fronts."
Provisional protection only.

BLACKWELL. 20th January 1863.

176. SAMUEL BLACKWELL, of 259, Oxford Street, in the County of Middlesex, Saddler, for an invention for—"Improvements in apparatus for applying water or other fluid to the legs and other parts of horses and other animals."
Letters Patent sealed.

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MEEARS. 21st January 1863.	**177.** JOSEPH WILLIAM MEEARS, of 4, Whistlers Court, Cannon Street, in the City of London, Gentleman, for an invention for—"A new and improved method for making sash frames and sashes, and suspending the same by atmospheric or gas pressure." *Letters Patent sealed.*
PHILLIPS. 21st January 1863.	**178.** ANDREW PHILLIPS, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in looms for weaving figured fabrics." *Letters Patent sealed.*
WRIGHT. 21st January 1863.	**179.** THOMAS WRIGHT, of Wakefield, in the County of York, for an invention for—"Improvements in the manufacture of cast iron pipes and the apparatus employed for that purpose."—*A communication to him from Wm. Hainsworth, Ironfounder, St. John's, New Brunswick, North America.* *Provisional protection* NOT *granted.*
BUSCH. 21st January 1863.	**180.** FREDERIC AUGUSTUS BUSCH, of Briton Ferry, South Wales, for an invention for—"Improvements in the manufacture of metallic vessels or receptacles for containing liquids or substances." *Provisional protection only.*
KIRK. 21st January 1863.	**181.** JOSEPH MOXON KIRK, of Halifax and Bradford, in the County of York, Dyer and Finisher, for an invention for—"An improved method of and means or apparatus for finishing textile fabrics." *Provisional protection only.*
BARLOW. 21st January 1863.	**182.** HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Certain improvements in jacquard machines."—*A communication to him from abroad by Hercules Erba, of Paris, in the Empire of France, Manufacturer.* *Provisional protection only.*
HOLT. 21st January 1863.	**183.** JAMES HOLT, of Oldham, in the County of Lancaster, Machinist, for an invention for—"Improvements in willowing and opening cotton and other fibrous substances." *Letters Patent sealed.*
BOUBEE. 21st January 1863.	**184.** ADOLPHE BOUBEE, of Paris, in the Empire of France, Manufacturer, for an invention for—"Improvements in apparatus for casting or moulding articles in glass and in imitation of precious stones or marbles." *Letters Patent sealed.*
CLARK. 21st January 1863.	**185.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in preparing and obtaining photogenic pictures or representations."—*A communication to him from abroad by Adolphe Teissonnière, of 29, Boulevart St. Martin, Paris, Merchant.* *Letters Patent sealed.*
CLARK. 21st January 1863.	**186.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in desiccating and in preserving matters from decay."—*A communication to him from abroad by Jean Baptiste Pierre Camille Bergoukhioux, of 29, Boulevart de Martin, Paris, Gentleman.*" *Provisional protection only.*
BAZIN. 21st January 1863	**187.** ERNEST BAZIN, of Angers, in the Department of the Maine-et-Loire, in the Empire of France, Engineer, for an invention for—"An improved log." *Letters Patent sealed.*
ROECKNER. 21st January 1863.	**188.** CARL HEINRICH ROECKNER, of Richmond Terrace, Clapham Road, in the County of Surrey, for an invention for—"Improvements in machinery and process for reducing wood to a fibrous condition, for the manufacture of paper stuff or pulp." *Provisional protection* NOT *granted.*
LINDSAY. 21st January 1863.	**189.** SIR COUTTS LINDSAY, of 11, Grosvenor Square, in the County of Middlesex, for an invention for—"Improvements in apparatus to be used on railways to indicate to the engine driver of a carriage train the length of time which has intervened since the passing of a previous train." *Letters Patent sealed.*
PENNINGTON. 21st January 1863.	**190.** ALBERT PENNINGTON, of No. 1, Rectory Villas, West Hackney, in the County of Middlesex, for an invention for—"Improvements in apparatus for beating mats, rugs and other such like articles." *Provisional protection only.*
CLAYTON. SHUTTLEWORTH. 21st January 1863.	**191.** NATHANIEL CLAYTON, and JOSEPH SHUTTLEWORTH, of Lincoln, in the County of Lincoln, for an invention for—"Improvements in rotatory screens suitable for screening wheat and other grain or seed." *Letters Patent sealed.*

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CARO.
DALE.
21st January 1863.

192. HEINRICH CARO, of Manchester, in the County of Lancaster, Chemist, and JOHN DALE, of the same place, Manufacturing Chemist, for an invention for—"Improvements in obtaining colouring matters, part of which improvements is also applicable to dyeing and printing." *Letters Patent sealed.*

HOLCROFT.
21st January 1863.

193. HENRY HOLCROFT, of Rue de la Grandière, Tours, in the Empire of France, Civil Engineer, for an invention for—"Improved machinery for separating substances of different specific gravities." *Letters Patent sealed.*

HARRISON.
CROASDALE.
22nd January 1863.

194. WILLIAM HARRISON, of the Firm of Messieurs J. Harrison and Sons, of Blackburn, in the County of Lancaster, Machine Makers, and BENJAMIN CROASDALE, of Witton, near Blackburn, aforesaid, Overlooker, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

BRANDÈS.
22nd January 1863.

195. JULES COHEN BRANDÈS, of No. 24, Rue de Dunkerque, Paris, in the Empire of France, for an invention for—"An improved hair creaser or divider." *Provisional protection only.*

GRANT.
22nd January 1863.

196. JOHN GRANT, of Albion Place, Maidstone, in the County of Kent, Farmer, for an invention for—"Improvements in the construction of sidings and loop lines for railways or tramways, whether portable or otherwise." *Letters Patent sealed.*

ELLACOTT.
22nd January 1863.

197. JOHN ELLACOTT, of Liverpool, in the County of Lancaster, Surveyor, for an invention for—"Improvements applicable to spur wheels, racks and other toothed gear, to insure greater strength in the teeth." *Provisional protection only.*

BINGER.
22nd January 1863.

198. JAMES MARTIN BINGER, of Brussels, in the Kingdom of Belgium, Gentleman, for an invention for—"An improved paste or composition to cover the rollers used by letter press printers." *Letters Patent sealed.*

PENNEY.
22nd January 1863.

199. ROBERT PENNEY, of Carrbrook, in the County of Chester, Color Mixer, for an invention for—"An improved solution or mixture for 'fixing' certain colors employed in printing calico and other fabrics." *Letters Patent sealed.*

BLACKWOOD.
BLACKWOOD.
22nd January 1863.

200. WILLIAM BLACKWOOD, and JOHN BLACKWOOD, of Craigton, in the County of Dumbarton, North Britain, Bleachers, for an invention for—"Improvements in machinery for drying yarns or threads." *Provisional protection only.*

CLARK.
22nd January 1863.

201. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improvement in piston valves and other pistons."—*A communication to him from abroad by Thomas Shrimton Davis, of Jersey City, in the County of Hudson, and State of New Jersey, United States of America, Machinist.* *Letters Patent sealed.*

WOOD.
STOCKLEY.
22nd January 1863.

202. NICHOLAS WOOD, of Hetton Hall, in the County of Durham, Coal Owner, and JOSEPH STOCKLEY, of Newcastle-on-Tyne, in the County of Northumberland, Engineer, for an invention for—"Improvements in apparatus for grinding, smoothing and polishing plate glass." *Letters Patent sealed.*

LAMBERT.
22nd January 1863.

203. THOMAS LAMBERT, of Short Street, Lambeth, in the County of Surrey, Hydraulic Engineer, for an invention for—"Improvements in apparatus for drawing off water or other fluids." *Letters Patent sealed.*

LUNGLEY.
22nd January 1863.

204. CHARLES LUNGLEY, of Deptford, in the County of Kent, Ship Builder, for an invention for—"Improvements in means for facilitating the repairs of ships and other structures." *Provisional protection only.*

MORLEY.
22nd January 1863.

205. FRANCIS WILLIAM MORLEY, of Bedford, in the County of Bedford, Engineer, for an invention for—"Improvements in boilers for steam-engines and in valves to be used therewith." *Provisional protection only.*

MILNER.
23rd January 1863.

206. JOHN MILNER, of No. 7, Bridge Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

HENDERSON.
23rd January 1863.

207. ALEXANDER HENDERSON, of Dundee, in the County of Forfar, North Britain, Spinner, for an invention for—"Improvements in the preparation or manufacture of textile materials and in the machinery or apparatus used therein." *Provisional protection only.*

STRANGMAN.
23rd January 1863.

208. EDWARD STRANGMAN, of Waterford, in the County of Waterford, Ireland, for an invention for—"Improvements in pipes for smoking tobacco." *Letters Patent sealed.*

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STOPFORD. 23rd January 1863.

209. CHARLES STOPFORD, of Bristol, in the County of Gloucester, Hat and Cap Manufacturer, for an invention for—"Improvements in the construction of hats and other coverings for the head." *Letters Patent sealed.*

GISBORNE. 23rd January 1863.

210. FREDERIC NEWTON GISBORNE, of No. 3, Adelaide Place, London Bridge, in the City of London, Engineer and Electrician, for an invention for—"Improvements in the means of communicating signals on board ship and of indicating the position of the rudder." *Letters Patent sealed.*

CLARK. 23rd January 1863.

211. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in mariners' compasses."—*A communication to him from abroad by Georges Fabre, of 29, Boulevart St. Martin, Paris, Captain, Mercantile Marine.* *Provisional protection only.*

COLE. 23rd January 1863.

212. PERCY ADDISON COLE, of Croydon Street, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the articles of dress known as collars, cuffs, wristbands, shirt fronts, habit shirts and petticoats." *Provisional protection only.*

TURNER. 23rd January 1863.

213. CORNELIUS TURNER, of Airedale Felt Mills, Hunslet, in the parish of Leeds, in the County of York, for an invention for—"Improvements in the manufacture of felted fabrics." *Letters Patent sealed.*

HUGHES. 23rd January 1863.

214. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Alexander Schmalz, of 13, Rue Gaillon, Paris, Merchant.* *Provisional protection only.*

GLOSSOP. 24th January 1863.

215. ARTHUR OSBORNE GLOSSOP, of Sheffield, in the County of York, Silversmith, for an invention for—"Certain improvements in the construction and manufacture of breakfast, cruet and liquor frames used in dinner and other services." *Provisional protection only.*

MELLOR. WHALEY. 24th January 1863.

216. WILLIAM MELLOR, of Ardwick, in the City of Manchester, and WILLIAM WHALEY, of Rainow, in the County of Chester, Tool Makers, for an invention for—"Improvements in steam hammers and other engines driven by steam." *Letters Patent sealed.*

ALLEN. JOHNSON. 24th January 1863.

217. WILLIAM ALLEN, of Cheadle, in the County of Chester, Cotton Spinner, and WILLIAM JOHNSON, of Newton Moor, in the same County, Manager, for an invention for—"Certain improvements in machinery or apparatus for grinding or pointing the 'cards' employed in carding-engines." *Letters Patent sealed.*

SHACKLETON. 24th January 1863.

218. ELLIS SHACKLETON, of Loth, near Ruysbrook, in the Kingdom of Belgium, Overlooker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

BOOTH. BOOTH. SWALLOW. 24th January 1863.

219. EDWARD BOOTH, and GEORGE BOOTH, both of Gorton, near Manchester, in the County of Lancaster, Gum and Chemical Manufacturers, and ANDREW SWALLOW, of Staley-Bridge, in the said County, Color Mixer, for an invention for—"Certain improvements in the mode of fixing coloring matter on cotton, silk, wool and other fibres and materials, and certain improvements in finishing such like and other textile fabrics and yarns." *Provisional protection only.*

MENNONS. 24th January 1863.

220. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and De Telescheff, Home and Foreign Patent Agents, 24, Rue de Dunkerque, Paris, in the Empire of France, for an invention for—"Improvements in machinery for punching and cutting metals."—*A communication from Nicolas De Telescheff (Captain of Artillery), a person resident at No. 16, Malaya Morsquaïa, St. Petersburg, in the Empire of Russia.* *Letters Patent sealed.*

CLARK. 24th January 1863.

221. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in syphons applied to draining, irrigation and other purposes, whereby they self-suspend and resume action according to requirements."—*A communication to him from abroad by François Triballat, of 29, Boulevart St. Martin, Paris, Merchant.* *Provisional protection only.*

SAX. 24th January 1863.

222. ANTOINE JOSEPH SAX, trading under the firm of Adolphe Sax, of Paris, France, Musical Instrument Maker, for an invention for—"Improvements in rendering drum skins and gut strings less liable to hygrometric influences." *Letters Patent sealed.*

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BROOMAN. 24th January 1863.

223. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of anvils and other metal articles requiring hard surfaces."—*A communication to him from abroad by Louis Jules Duhesme, Alexandre Rey and Ernest Munux, all of Boutancourt, France.* *Letters Patent sealed.*

TOLHAUSEN. 24th January 1863.

224. FREDERICK TOLHAUSEN, of No. 17, Rue du Faubourg Montmartre, Paris, Patent Agent, for an invention for—"Improvements in looms for weaving ribbons."—*A communication from Antoine Comte, a person resident at St. Etienne (Loire), France.* *Provisional protection only.*

TOLHAUSEN. 24th January 1863.

225. FREDERICK TOLHAUSEN, of 17, Faubourg Montmartre, Paris, Patent Agent, for an invention for—"Improvements in machines for carding fibrous materials."—*A communication from Henry Bosshard, Mechanical Engineer, a person resident at the number and street aforesaid.* *Letters Patent sealed.*

STANLEY. 26th January 1863.

226. WILLIAM FORD STANLEY, of 3, Great Turnstile, London, W.C., Mathematical Instrument Maker, for an invention for—"Improvements in mathematical drawing instruments." *Letters Patent sealed.*

FELL. 26th January 1863.

227. JOHN BARRACLOUGH FELL, of Sparkbridge, near Newton in Cartmel, in the County of Lancaster, Engineer, for an invention for—"Improvements in working railway engines and carriages on steep inclines." *Letters Patent sealed.*

SMITH. 26th January 1863.

228. ANDREW SMITH, of Mauchlin, in the County of Ayrshire, North Britain, Gentleman, for an invention for—"Improvements in certain parts of staples, locks, bolts, latches and other similar fastenings." *Provisional protection only.*

FYFE. 26th January 1863.

229. JAMES FYFE, of Greenock, in the County of Renfrew, North Britain, Brass Founder and Valve Maker, for an invention for—"Improvements in safety apparatus for steam-boilers." *Provisional protection only.*

LIÉTOUT. ROISIN. 26th January 1863.

230. ALFRED LEONORE LIÉTOUT, of Paris, France, Doctor of Medicine, and JOSEPH BRIGITTE ROISIN, of No. 56, Rue de Sablonville, at Neuilly, near Paris, Merchant, for an invention for—"Improvements in gymnastical apparatus." *Letters Patent sealed.*

BROOMAN. 26th January 1863.

231. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in petticoats or crinolines."—*A communication to him from abroad by Charles Edmond François Couturier, of Paris, France.* *Provisional protection only.*

HENSON. 27th January 1863.

232. HENRY HENSON HENSON, of No. 13, Parliament Street, Westminster, in the County of Middlesex, Engineer, for an invention for—"Improvements in fabrics for covering floors, walls, roofs and other surfaces or objects, which fabrics are also partly applicable to the manufacture of waterproof articles." *Letters Patent sealed.*

DAVIES. 27th January 1863.

233. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in preserving provisions and in the apparatus employed for such purpose."—*A communication to him from abroad by Alfred Henry Rémond, of Paris, France.* *Provisional protection only.*

GILPIN. HIATT. 27th January 1863.

234. WILLIAM GILPIN, of Newland Street, London, and JOSIAH HIATT, of Rotherfield Street, Islington, London, for an invention for—"Improvements in the fastenings of umbrellas and parasols." *Provisional protection* NOT *granted.*

ASH. 27th January 1863.

235. CHARLES FREDERICK ASH, 20 & 21, Upper Thames St., in the City of London, Iron Merchant, for an invention for—"Improvements in the manufacture of cornices, joints and laths of bedsteads and other articles of furniture." *Provisional protection only.*

ASKEW. 27th January 1863.

236. CHARLES ASKEW, of Charles Street, Hampstead Road, in the County of Middlesex, Engineer, for an invention for—"An improved railway chair and joint for rails on railways." *Provisional protection only.*

ROLLASON. 27th January 1863.

237. WILLIAM ROLLASON, the younger, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of metallic boxes." *Letters Patent sealed.*

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GREEN.
27th January 1863.

238. RICHARD AUGUSTUS WILLOUGHBY GREEN, of Putney, in the County of Surrey, and of Sydney, New South Wales, Boat Builder, for an invention for—"Improvements in light rowing boats, usually termed wager boats."
Provisional protection only.

EDMONDSON.
INGRAM.
27th January 1863.

239. JOSEPH EDMONDSON, of Frizinghall, near Bradford, in the County of York, Manufacturer, and THOMAS INGRAM, of Bradford, aforesaid, for an invention for—"Improvements in looms and apparatus for weaving." *Letters Patent sealed.*

GORDON.
27th January 1863.

240. THOMAS GORDON, of No. 41, King Street, Soho, in the County of Middlesex, for an invention for—"An improved method of and apparatus for damping and affixing postage stamps to letters." *Provisional protection only.*

HUGHES.
27th January 1863.

241. DAVID EDWARD HUGHES, of the United Kingdom Electric Telegraph Company (Limited), Gresham House, Old Broad Street, in the City of London, Electrical Engineer, for an invention for—"Improvements in means or apparatus for effecting telegraphic communications." *Letters Patent sealed.*

WILKINS.
27th January 1863.

242. WILLIAM CRANE WILKINS, of Long Acre, in the County of Middlesex, Lighthouse Engineer, for an invention for—"Improvements in lamps."
Provisional protection only.

BARLOW.
28th January 1863.

243. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in preserving timber and in apparatus employed therein."—*A communication to him from abroad by Etienne Marechal, of Paris, in the Empire of France, Engineer on the Orleans Railway.* *Letters Patent sealed.*

WATSON.
28th January 1863.

244. HORATIO WATSON, of Renton, in the County of Dumbarton, North Britain, Brick Builder, for an invention for—"Improvements in the heating arrangements of stoves for drying woven fabrics." *Provisional protection only.*

PARKINSON.
28th January 1863.

245. THOMAS PARKINSON, of Bury, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in carding-engines."
Provisional protection only.

GEDGE.
28th January 1863.

246. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved machinery or apparatus for fastening by screws boots, shoes and other articles composed of leather."—*A communication to him from abroad by Henry Chrétien Cordes and Leonard Wainschenck, both of No. 15, Passage des Petites Ecuries, Paris, France.* *Letters Patent sealed.*

PRENTISS.
SELLARS.
28th January 1863.

247. ELIJAH FREEMAN PRENTISS, of Birkenhead, in the County of Chester, Manufacturing Chemist, and JOHN CARRINGTON SELLARS, of the same place, Chemist, for an invention for—"Improvements in treating rock oil, petroleum, paraffine oil, coal oil and paraffine and other like mineral oils and products therefrom." *Provisional protection only.*

OGLESBY.
DICKINSON.
DICKINSON.
DICKINSON.
28th January 1863.

248. JOHN OGLESBY, JOHN DICKINSON, WILLIAM MARK DICKINSON, and JOHN DICKINSON, the younger, all of York, in the County of York, for an invention for—"Improvements in apparatus for steaming, cooking, and generating gas."
Letters Patent sealed.

COOK.
TERREY.
28th January 1863.

249. HENRY OCEANUS COOK, late Lieutenant, Indian Navy, and ELIJAH GEORGE TERREY, both of 12, Lower Clifton Street, Finsbury, in the County of Middlesex, for an invention for—"Improvements in propelling ships and vessels, and in apparatus employed therein." *Letters Patent sealed.*

MACE.
28th January 1863.

250. CHARLES MACE, of Sunderland, in the County of Durham, Practical Engineer, for an invention for—"Improvements in steam-engines for propelling vessels and for other purposes." *Letters Patent sealed.*

WARD.
28th January 1863.

251. ROBERT WARD, of the North of England Advertiser Office, Newcastle-on-Tyne, for an invention for—"Improvements in locking up or fastening forms of type or other printing surfaces." *Letters Patent sealed.*

WYMER.
28th January 1863.

252. FRANCIS WILLIAM WYMER, Engineer, of 7, Saint Ann's Row, Newcastle-on-Tyne, for an invention for—"Improvements in steam-engines."
Letters Patent sealed.

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PLATT.
28th January 1863.

253. JAMES PLATT, of 10, Charlotte Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in rotatory engines. *Letters Patent sealed.*

CONISBEE.
28th January 1863.

254. WILLIAM CONISBEE, of Nos. 39 & 40, Herbert's Buildings, Waterloo Road, in the County of Surrey, for an invention for—"Improvements in cylindrical chromo-lithographic printing machines." *Letters Patent sealed.*

FRANCIS.
28th January 1863.

255. SAMUEL WILLIAM FRANCIS, of Gray's Inn Road, in the County of Middlesex, Shutter Maker, for an invention for—"Improvements in revolving shutters." *Letters Patent sealed.*

CLARK.
28th January 1863.

256. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the means and apparatus for copying and reproducing sculpture and other objects of art."—*A communication to him from abroad by François Willème, of 29, Boulevart St. Martin, Paris, Sculptor.* *Letters Patent sealed.*

JOHNSON.
28th January 1863.

257. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of braid and in machinery or apparatus employed therein."—*A communication to him from abroad by Thomas James Sloan, of Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

STEWART.
ROBINSON.
28th January 1863.

258. CHARLES PATRICK STEWART, and JOHN ROBINSON, of the firm "Sharp, Stewart and Company," Atlas Works, Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in and applicable to that apparatus known as 'Giffard's injector,' and in the adaptation of it to locomotive and other boilers." *Letters Patent sealed.*

MUNTZ.
28th January 1863.

259. EUGENE GUSTAVUS MUNTZ, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in securing axles and axle-boxes." *Letters Patent sealed.*

CRICHLEY.
28th January 1863.

260. HENRY CRICHLEY, of Birmingham, in the County of Warwick, Ironfounder, for an invention for—"Improvements in reaping and mowing machines."—*A communication to him from abroad by Robert Bodington, of Melbourne, Victoria, in the Colony of Australia.* *Letters Patent sealed.*

BROMWICH.
28th January 1863.

261. BRYAN I'ANSON BROMWICH, late of Natal, but now residing at Charterhouse Square, in the City of London, Gentleman, for an invention for—"An improved mode of obtaining and applying motive-power." *Letters Patent sealed.*

BONNEVILLE.
29th January 1863.

262. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in the construction of granaries."—*A communication from Louis Jean Gustave de Coninck, Merchant, a person now residing at 24, Rue du Mont Thabor, Paris, in the Empire of France.* *Complete specification; Letters Patent sealed.*

WESTON.
29th January 1863.

263. THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"A new or improved coupling and break for transmitting or regulating or arresting motion. *Letters Patent sealed.*

LOUIT.
29th January 1863.

264. JEAN BAPTISTE EMILE LOUIT, aîné, of Bordeaux, in the Empire of France, Gentleman, for an invention for—"Improvements in the glasses termed chimneys used for gas or other lights." *Provisional protection only.*

MACKENZIE.
29th January 1863.

265. JAMES MACKENZIE, of Arundel Square, Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in shaping machines for curvilinear surfaces." *Complete specification; Letters Patent sealed.*

BROOMAN.
29th January 1863.

266. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of candles."—*A communication to him from abroad by Pierre Louis Durand, of Paris, France.* *Provisional protection only.*

POUNCY.
29th January 1863.

267. JOHN POUNCY, of Dorchester, in the County of Dorset, for an invention for—"Improvements in obtaining, transferring and printing from photographic pictures or images, also in preparing materials for the same." *Letters Patent sealed.*

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BALL. WILKINS. 29th January 1863.

268. WILLIAM BALL, and JOHN WILKINS, both of Nottingham, for an invention for—"Improvements in machinery employed in the manufacture of looped fabrics." *Provisional protection only.*

NADAL. 29th January 1863.

269. JEAN NADAL, of Brooke's Market, Brook Street, Holborn, in the County of Middlesex, for an invention for—"Improvements in fountains." *Provisional protection only.*

CLAYTON. SHUTTLEWORTH. 29th January 1863.

270. NATHANIEL CLAYTON, and JOSEPH SHUTTLEWORTH, of Stamp End Works, Lincoln, for an invention for—"Improvements in thrashing machines." *Letters Patent sealed.*

WILLIAMS. 29th January 1863.

271. CHARLES HANSON GREVILLE WILLIAMS, of Rumford Street, Glasgow, for an invention for—"Improvements in the manufacture of red colouring matters." *Letters Patent sealed.*

PRITCHARD. 29th January 1863.

272. ARTHUR PRITCHARD, of Derby, in the County of Derby, Black Lead Manufacturer, for an invention for—"An improved method of preserving the contents of packages from air, water, or damp. *Letters Patent sealed.*

BLAKE. 29th January 1863.

273. GIDEON BLAKE, of Trowbridge, in the County of Wilts, for an invention for —"Improvements in apparatus for heating and warming." *Letters Patent sealed.*

CLARK. 29th January 1863.

274. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the condensation of steam and in apparatus for the same."—*A communication to him from abroad by Amédée Mathurin Gabriel Sébillot, of 29, Boulevart St. Martin, Paris, Civil Engineer. Letters Patent sealed.*

SAINTY. 29th January 1863.

275. JOHN SAINTY, of Burnham, in the County of Norfolk, Agricultural Implement Manufacturer, for an invention for—"Improvements in feeding troughs for sheep and other cattle." *Provisional protection only.*

STUBER. 29th January 1863.

276. FREDERICK GEORGE STUBER, Teacher, of No. 1, St. James's Road, Brixton, in the County of Surrey, for an invention for—"Improvements in the construction of air-tight boxes, cases, cupboards and similar vessels." *Letters Patent sealed.*

BRANFORD. 30th January 1863.

277. JOHN WILLIAM BRANFORD, Merchant, of March, in the County of Cambridgeshire, for an invention for—"Improvements in horse hoes and in the means of using the same in husbandry." *Provisional protection only.*

GEDGE. 30th January 1863.

278. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for cleansing chimneys or other flues."—*A communication to him from abroad by Eutrope Malavergne, of the Rue du Faubourg Saint Martin, Paris, France. Provisional protection only.*

GEDGE. 30th January 1863.

279. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in cones or forms for moulding refined sugar."—*A communication to him from abroad by Ferdinand Wittmann, of Rue du Faubourg St. Martin, Paris, France. Provisional Protection only.*

COCKER. 30th January 1863.

280. JAMES COCKER, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"An improved turnstile especially applicable to omnibuses and other vehicles, to shew or indicate the number of passengers that have been carried." *Provisional protection only.*

LLOYD. 30th January 1863.

281. NICHOLAS PHILIP COMINS LLOYD, residing at Number One, Liverpool Street, in the City of London, for an invention for—"An improved atmospheric engine applicable to purposes to which steam, horse, wind and water power is applied." *Provisional protection only.*

NEWTON. 30th January 1863.

282. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the couplings for railway carriages."—*A communication to him from abroad by George Collyer, of Philadelphia, United States of America. Letters Patent sealed.*

GEDGE. 30th January 1863.

283. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in hair nets."—*A communication to him from abroad by Edmond Paul Gilet, of Tours, in the Empire of France, Hair Dresser. Letters Patent sealed.*

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SMITH. 31st January 1863.

284. MARK SMITH, of the firm of Messieurs William Smith and Brothers, of Heywood, in the County of Lancaster, Machine Makers, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

LIGHTFOOT. TRACHSEL. 31st January 1863.

285. JOHN LIGHTFOOT, of Accrington, in the County of Lancaster, Chemist, and FREDERICK TRACHSEL, of Manchester, in the said County, Chemist, for an invention for—"Improvements in machinery or apparatus used in the process of distillation." *Provisional protection only.*

BENNETT. 31st January 1863.

286. THOMAS BENNETT, of Worcester, in the County of Worcester, Photographic Artist, for an invention for—"Improved arrangements for obtaining pictorial back grounds, fore grounds and perspectives, when taking photographic portraits or sun pictures." *Letters Patent sealed.*

GROSSMITH. 31st January 1863.

287. JOHN GROSSMITH, of 85, Newgate Street, in the City of London, Merchant, for an invention for—"An improved mode of producing the aura electric gas." *Provisional protection only.*

TOLHAUSEN. 31st January 1863.

288. FREDERICK TOLHAUSEN, of 17, Faubourg Montmartre, Paris, Civil Engineer and Patent Agent, for an invention for—"New or improved apparatus for cleaning the beams of mules and spinning frames, collecting the dust and waste thereof, and also for cleaning the flooring underneath the mule carriages."—*A communication from Edward Isler, a person resident at No. 17, Faubourg Montmartre, aforesaid.* *Letters Patent sealed.*

DRUMMOND. 31st January 1863.

289. WILLIAM DRUMMOND, of the Bank of England, for an invention for—"Improvements in apparatus for stopping the supply of gas to burners when the light is put out." *Provisional protection only.*

LYTTLE. 31st January 1863.

290. WILLIAM ALEXANDER LYTTLE, of Andover Lodge, Albion Road, Hammersmith, in the County of Middlesex, Gentleman, for an invention for—"Improvements connected with cigars and other tobacco smoking appliances." *Provisional protection only.*

WILSON. 31st January 1863.

291. EDWARD BROWN WILSON, of Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in supplying air, gases, steam or fluids to iron and other furnaces, and to engines and vessels requiring such supply, and in the apparatus employed therein. *Provisional protection only.*

GRICE. 2nd February 1863.

292. FREDERIC GROOM GRICE, of West Bromwich, in the County of Stafford, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of bolts, spikes, rivets and screw blanks." *Letters Patent sealed.*

MASSEY. 2nd February 1863.

293. EDWIN HOPE MASSEY, of 15, Pine Grove, Crown Street, Liverpool, in the County of Lancaster, Painter, for an invention for—"Improved preparations or compositions for coating and colouring the walls, ceilings and other parts of buildings." *Provisional protection only.*

GIBSON. 2nd February 1863.

294. JOHN GIBSON, of the firm of Gibson Brothers, of Heptonstall, in the Parish of Halifax, and County of York, Manufacturers, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

FORBES. 2nd February 1863.

295. ALEXANDER FORBES, of Canal Terrace, Aberdeen, for an invention for—"Improvements in means or apparatus for soldering together parts of vessels formed of tin or tinned plate." *Letters Patent sealed.*

BARNES. 2nd February 1863.

296. WILLIAM CHARLES BARNES, of the Royal Small Arms Factory, Enfield, in the County of Middlesex, for an invention for—"Improvements in means or apparatus for shaping, rolling or compressing metal." *Letters Patent sealed.*

FRITH. 2nd February 1863.

297. RICHARD HASTINGS FRITH, of Leinster Road, Rathmines, in the County of Dublin, Civil Engineer, for an invention for—"Improvements in the manufacture of paper." *Provisional protection only.*

WILSON. 2nd February 1863.

298. EDWARD BROWN WILSON, of No. 5, Parliament Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the manufacture of gas. *Provisional protection* NOT *granted.*

CLARK. 2nd February 1863.

299. WILLIAM CLARK, of Quadrant Road, Highbury New Park, in the County of Middlesex, Engineer, for an invention for—"Improvements in armour-plated and other ships." *Letters Patent sealed.*

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SMITHIES.
SMITHIES.
3rd February 1863.

300. CHARLES SMITHIES, of Manchester, in the County of Lancaster, Commission Agent, and GEORGE LANCELOT SMITHIES, of the same place, Clerk, for an invention for—"Certain improvements in preparing and bleaching 'rhea' and other fibrous materials and fibres, which improvements are also applicable to bleaching yarns or piece goods." *Letters Patent sealed.*

RAWORTH.
3rd February 1863.

301. THOMAS RAWORTH, of Leicester, in the County of Leicester, Elastic Web Weaver, for an invention for—"Improvements in looms for weaving ribbons, elastic webbing and other narrow fabrics." *Letters Patent sealed.*

HOLCROFT.
3rd February 1863.

302. GEORGE HOLCROFT, of the City of Manchester, Consulting Engineer, for an invention for—"Improvements in preparing cotton for the operations of spinning and weaving." *Provisional protection only.*

ODDY.
OLDFIELD.
3rd February 1863.

303. SAMUEL ODDY, and EDWARD OLDFIELD, both of the Adelphi Iron Works, Salford, in the County of Lancaster, Machine Makers, for an invention for—"Certain improvements in carding-engines." *Provisional protection only.*

FLETCHER.
BOWER.
3rd February 1863.

304. JOSEPH FLETCHER, of Droylesden, near Manchester, Engineer, and HENRY BOWER, of Halifax, in the County of York, for an invention for—"An improved injector or apparatus for feeding boilers with water." *Letters Patent sealed.*

BLAKELY.
VAVASSEUR.
3rd February 1863.

305. ALEXANDER THEOPHILUS BLAKELY, of Parliament Street, in the City of Westminster, late Captain Royal Artillery, and JOSIAH VAVASSEUR, of Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in projectiles for ordnance." *Letters Patent sealed.*

JACOBS.
3rd February 1863.

306. THOMAS LUCKER JACOBS, of Burton-on-Trent, in the County of Stafford, Cooper, for an invention for—"An improved mode of and apparatus for cleaning casks." *Letters Patent sealed.*

VALENTIN.
LEVICK.
3rd February 1863.

307. WILLIAM GEORGE VALENTIN, of the Royal College of Chymistry, Government School of Mines, Oxford Street, in the County of Middlesex, Chymist, and FREDERICK LEVICK, of Blaina, in the County of Monmouth, Iron Master, for an invention for—"Improvements in generating combustible gases and in the apparatus employed therefor." *Letters Patent sealed.*

NEWTON.
3rd February 1863.

308. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in reflectors."—*A communication to him from abroad by Pierre Thibault, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

HARTON.
4th February 1863.

309. GEORGE HARTON, of North Road, Highgate, in the County of Middlesex, for an invention for—"Improvements in wood paving." *Provisional protection only.*

MELLOR.
4th February 1863.

310. JAMES MELLOR, of the Ardwick Chemical Works, in the City of Manchester, Manufacturing Chemist, for an invention for—"Improvements in apparatus to be used in distilling, subliming and drying." *Letters Patent sealed.*

TALLENT.
4th February 1863.

311. THOMAS EDWARD TALLENT, New Church Street, Bermondsey, for an invention for—"Improvements in the manufacture of leather and in machinery for that purpose." *Provisional protection only.*

BRADFORD.
4th February 1863.

312. THOMAS BRADFORD, of the Cathedral Steps, Manchester, in the County of Lancaster, and Fleet Street, London, Washing Machine Manufacturer, for an invention for—"Improvements in machinery or apparatus for washing, wringing and mangling clothes or other textile fabrics." *Letters Patent sealed.*

HASELTINE.
4th February 1863.

313. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the mode of uniting metallic surfaces."—*A communication to him from abroad by William Brainerd Barnard, of New Haven, State of Connecticut, United States of America.* *Letters Patent sealed.*

BOUSFIELD.
4th February 1863.

314. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in postage, revenue and other stamps, and in apparatus for post marking and cancelling postage and other stamps."—*A communication to him from abroad by Marcus Porter Norton, a person resident at Troy, New York, in the United States of America.* *Letters Patent sealed.*

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HAYS.
4th February 1863.

315. JOSEPH JUDGE HAYS, of Hitchin, in the County of Hertford, Gentleman, for an invention for—" An improved hot air stove, where peat charcoal is the fuel employed, and for the method of using peat charcoal or other suitable fuel in connection with the said stove or other stoves, for the purpose of purifying or filtering the gaseous products of combustion." *Letters Patent sealed.*

MARVILLE.
4th February 1863.

316. LOUIS JOSEPH HENRY MARVILLE, of 2, Rue Ste. Appoline, Paris, France, Merchant, for an invention for—" A new kind of covering for the ears, made of india-rubber, gutta percha or other materials." *Letters Patent sealed.*

PARKES.
4th February 1863.

317. ZACHARIAH MAJOR PARKES, of 2, Upper Park Place, Plumstead Common, in the County of Kent, Gentleman, for an invention for—" An improvement in iron and other metal bond for use in building." *Provisional protection only.*

WESTON.
4th February 1863.

318. WILLIAM THOMAS WESTON, of 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—" An improved spring catch or fastening applicable to windows and other useful purposes." *Letters Patent sealed.*

RUSS.
4th February 1863.

319. BARNABAS RUSS, of Bristol, in the County of Gloucester, for an invention for—" Improvements in the construction of iron ships or vessels and of armour applicable thereto." *Letters Patent sealed.*

FAULKNER.
FAULKNER.
FAIRLEY.
STIFF.
4th February 1863.

320. CHARLES FAULKNER, and DAVID FAULKNER, trading under the style or firm of Faulkner Brothers, of Birmingham, in the County of Warwick, Gun Barrel Manufacturers, JAMES FAIRLEY, also of Birmingham, aforesaid, Commercial Agent, and WILLIAM CHARLES STIFF, of Edgbaston, near Birmingham, also in the County of Warwick, Military Gun Iron Inspector, for an invention for—" Improvements in the manufacture of gun barrels." *Letters Patent sealed.*

MANNING.
4th February 1863.

321. JAMES ALEXANDER MANNING, of the Inner Temple, London, Esquire, for an invention for—" Improvements in the treatment of night soil and other waste products, and for the manufacture of manure therefrom." *Letters Patent sealed.*

STOKES.
4th February 1863.

322. WILLIAM STOKES, Builder, of Edgbaston, in the Borough of Birmingham, in the County of Warwick, for an invention for—" Improvements in the construction of window sashes, whereby the same are rendered more weather proof and secure against draughts and burglars, and permit the outside to be cleaned with the facility of the inside." *Provisional protection only.*

MABLEY.
CHEETHAM.
5th February 1863.

323. WILLIAM TUDOR MABLEY, of Altrincham, in the County of Chester, Mechanical Engineer, and WILLIAM THOMAS CHEETHAM, of Ashton-under-Lyne, in the County of Lancaster, Mechanical Draftsman, for an invention for—" Improvements in blowing organs and other such musical instruments, parts of which improvements are also applicable to obtaining motive-power for other purposes." *Provisional protection only.*

GILL.
PARKIN.
5th February 1863.

324. JOSEPH GILL, Bleacher, Far Headingley, near Leeds, in the County of York, and JAMES PARKIN, Manager, of the same place, for an invention for—" Improvements in apparatus for polishing yarn, twine, threads and other similar materials." *Letters Patent sealed.*

BETTS.
5th February 1863.

325. WILLIAM BETTS, of Wharf Road, City Road, in the County of Middlesex, Capsule Manufacturer, for an invention for — " Improvements in apparatus for applying metallic capsules to bottles. *Letters Patent sealed.*

DIRCKS.
PEPPER.
5th February 1863.

326. HENRY DIRCKS, of Blackheath, in the County of Kent, Civil Engineer, and JOHN HENRY PEPPER, of No. 309, Regent St., in the County of Middlesex, Professor of Chemistry, and Honorary Director of the Polytechnic Institution, for an invention for—" Improvements in apparatus to be used in the exhibition of dramatic and other like performances." *Letters Patent sealed and specification filed by order.*

INGHAM.
5th February 1863.

327. EDWARD INGHAM, of Halifax and Bradford, in the County of York, Dyer and Finisher, for an invention for—" An improved apparatus for and means of dyeing wool in the sliver from which 'mixture-yarns' may be drawn." *Provisional protection only.*

BROOMAN.
5th February 1863.

328. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—" Improvements in machinery for supplying and spreading wool and other filamentous materials on belts, tables and other surfaces, to be afterwards carded and otherwise acted on."—*A communication to him from abroad by Jean Joseph Jules Pierrard, of Reims, France.*

Letters Patent sealed.

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PATERSON. 5th February 1863.

329. JOHN PATERSON, of Staining Lane, in the City of London, Warehouseman, for an invention for—"Improvements in buckle and hook fastenings."
Provisional protection only.

BROOMAN. 5th February 1863.

330. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatuses for tuning piano-fortes."—*A communication to him from abroad by François Delsarte, of Paris, France.* *Letters Patent sealed.*

BATES. 6th February 1863.

331. BENJAMIN FRANKLIN BATES, of Morley's Hotel, Strand, in the County of Middlesex, for an invention for—"Improvements in cannon and in projectiles to be used therewith."—*The result partly of communication from abroad made to him by Charles Macy, a person resident at New York, in the United States of America, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

HEINTZMANN. ROCHUSSEN. 6th February 1863.

332. ALEXIS HEINTZMANN, and THEODORE ANTHONY ROCHUSSEN, both of No. 9, Friday Street, Cheapside, in the City of London, Merchants, for an invention for—"An improved boring bench for gun barrels."—*A communication to them from abroad by Charles Berger, of Witten, in the Kingdom of Prussia, Gun Barrel Manufacturer.* *Provisional protection* NOT *granted.*

BLAKELEY. MEAKES. 6th February 1863.

333. THOMAS BLAKELEY, and BENJAMIN MEAKES, of 11, Bread Street Hill, Cannon Street, in the City of London, for an invention for—"An improved lead and stone pencil sharpener." *Provisional protection only.*

JOHNSTON. 6th February 1863.

334. ALEXANDER JOHNSTON, of Comely Bank, near Edinburgh (late of Craigleith), in the County of Mid Lothian, North Britain, Gentleman, for an invention for—"Improvements in the propulsion of vessels." *Letters Patent sealed.*

STEVENS. 6th February 1863.

335. GEORGE STEVENS, of Victoria Terrace, Camberwell, in the County of Surrey, for an invention for—"Improvements in means or apparatus for effecting a regular supply of air or aëriform fluids for various purposes." *Provisional protection only.*

CLARK. 6th February 1863.

336. ALEXANDER CLARK, of Staines, in the County of Middlesex, Carpenter, for an invention for—"Improvements in knife cleaning apparatus.
Provisional protection only.

BROOMAN. 6th February 1863.

337. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in carding-engines whereby slivers are formed into threads ready for spinning."—*A communication to him from abroad by François Jacques Grün, of Guebwiller, and Henri Gand, of Bühl, both in the Empire of France.* *Letters Patent sealed.*

ROBINS. 6th February 1863.

338. WILLIAM ROBINS, of 4, Dame Street, Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of fire lighters or faggots." *Provisional protection only.*

PRICE. 6th February 1863.

339. JOHN PRICE, of 84, High Street, Southampton, Wholesale Ship Chandler, for an invention for—"Improvements in signal lanterns suitable for being used in open boats." *Letters Patent sealed.*

TIVNANN. 6th February 1863.

340. RICHARD DENNIS TIVNANN, of Wordsley Brass Foundry, in the County of Stafford, Brass Founder, for an invention for—"Improvements in holster boxes or boxes for screws or pins to work in, and in the manufacture thereof."
Provisional protection only.

ELLISSEN. 6th February 1863.

341. ADOLF ELLISSEN, of Warwick Road, Maida Vale, in the County of Middlesex, Merchant, for an invention for—"An improved method of treating sheeting and plates of iron to be used in ship building and marine constructions, for protection against marine animals and marine plants." *Provisional protection only.*

CAMERON. 7th February 1863.

342. JOHN CAMERON, of the Hematite Iron Works, Barrow-in-Furness, in the County of Lancaster, Chemist, for an invention for—"Improvements in the manufacture of iron and alloys of iron." *Letters Patent sealed.*

SIROU. 7th February 1863.

343. JEAN SIROU, of Castel Sarrazin, in the Department of Tarn et Garonne, in the Empire of France, Contractor of Public Works, for an invention for—"A new medicinal preparation for internal and external application."
Provisional protection only.

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MALLISON. 7th February 1863.

344. JAMES MALLISON, junior, of Bolton-le-Moors, in the County of Lancaster, Yarn Agent, for an invention for—"Certain improvements in the process and method of dyeing yarns." *Provisional protection only.*

TURNER. 7th February 1863.

345. GEORGE TURNER, of No. 13, Rose Terrace, Brompton, in the County of Middlesex, Machinist, for an invention for—"Improvements in means or apparatus for mincing or cutting meat or other substances. *Letters Patent sealed.*

COOPER. 7th February 1863.

346. WILLIAM FYNDON COOPER, of Tooley Street, in the County of Surrey, Rectifying Distiller, for an invention for—"Improvements in distilling apparatus." *Provisional protection only.*

PARIGOT. GRIVEL. 7th February 1863.

347. CLAUDE PARIGOT, and ANTOINE GRIVEL, both of 29, Boulevart St. Martin, Paris, Civil Engineers, for an invention for—"Improvements in locks." *Letters Patent sealed.*

CLARK. 7th February 1863.

348. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the application of gas for the preparation of wood work generally and iron ships for their better preservation and reception of paint or other protecting coating, and for disinfecting ships, hospitals and other places."—*A communication to him from abroad by Henri De Lapparent, Civil Engineer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

JAMES. 7th February 1863.

349. JOSHUA JAMES, of 12, and 13, Red Cross Square, in the Parish of Cripplegate, in the City of London, for an invention for—"An improved covering for hooped skirts." *Provisional protection only.*

MILLER. STRUTHERS. 7th February 1863.

350. JAMES MILLER, of Glasgow, in the County of Lanark, North Britain, Pottery Manufacturer, and WILSON STRUTHERS, of Hamilton, in the County aforesaid, Gentleman, for an invention for—"Improvements in securing the corks, stoppers or lids of bottles, jars and other similar vessels." *Provisional protection only.*

HACKFORTH. 7th February 1863.

351. MATTHEW HACKFORTH, of Bentinck Street, Manchester Square, in the County of Middlesex, Painter and Decorator, for an invention for—"Improvements in shades or reflectors for lighting purposes." *Letters Patent sealed.*

REDRUP. 7th February 1863.

352. GEORGE REDRUP, of Loughborough, in the County of Leicester, Brewer, for an invention for—"Improvements in machinery for the cutting of chives, bungs, corks, spiles and vent or other pegs, and also in machinery for manufacturing the knives or cutters employed therein, such machinery being also applicable to the manufacture of trenails and other cylindrical and conical articles." *Letters Patent sealed.*

GROUCUTT. 7th February 1863.

353. DAVID GROUCUTT, of Coseley, in the County of Stafford, Iron Master, for an invention for—"An improvement or improvements in the manufacture of iron for making nails." *Provisional protection only.*

DOBSON. BARLOW. 9th February 1863.

354. BENJAMIN DOBSON, and EDWARD BARLOW, of Bolton, in the County of Lancaster, Machine Makers, for an invention for—"Certain improvements in carding-engines."—*A communication to them from abroad by John Lees Wrigley, of Chemnitz, in the Kingdom of Saxony.* *Letters Patent sealed.*

WILLIAMS. PRICE. 9th February 1863.

355. HENRY GEORGE WILLIAMS, and ROWLAND GWYNN PRICE, of Bontddu, near Dolgelly, in the County of Merioneth, Mining Engineers, for an invention for—"An improved machine for crushing and amalgamating auriferous quartz, and pulverizing and washing ores." *Provisional protection only.*

MACINTOSH. 9th February 1863.

356. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in obtaining and applying motive-power." *Provisional protection only.*

LAW. DOWNIE. 9th February 1863.

357. DAVID LAW, Iron Founder and Engineer, and JOHN DOWNIE, Engineer, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in traction engines or common road locomotives." *Letters Patent sealed.*

GOUCHER. 9th February 1863.

358. JOHN GOUCHER, of Worksop, in the County of Nottingham, Iron Founder, Engineer and Machinist, for an invention for—"Improvements in regulating the admission of air into the furnaces of steam-boilers." *Letters Patent sealed.*

SMITH. SMITH. 9th February 1863.

359. HENRY SMITH, and JOHN SMITH, both of Bury St. Edmunds, in the County of Suffolk, Implement Makers, for an invention for—"Improvements in drills or machines for depositing seed and manure." *Provisional protection only.*

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ROOFF.
9th February 1863.

360. WILLIAM BROWN ROOFF, of 7, Willow Walk, Kentish Town, in the Parish of St. Pancras, in the County of Middlesex, for an invention for—"An improved respirator." *Provisional protection only.*

CROSBY. SMITH.
10th February 1863.

361. JAMES CROSBY, of Audenshaw, in the County of Lancaster, Manufacturer, and JOHN BURNS SMITH, of Bury, in the County of Lancaster, Engineer, for an invention for—"Improvements in carding-engines for carding and drawing flax, tow, in part applicable to carding cotton or other fibrous substances." *Letters Patent sealed.*

HILL.
10th February 1863.

362. THOMAS HILL, of Hampton House, Great Warley, in the County of Essex, Brewer, for an invention for—"Improvements in the arrangements employed for the protection of markers at rifle butts." *Letters Patent sealed.*

BURLEY.
10th February 1863.

363. ROBERT BURLEY, of Glasgow, in the County of Lanark, North Britain, Hammer Handle Maker, for an invention of—"Improvements in handles for hammers, mallets, picks, mattocks and similar tools." *Letters Patent sealed.*

WIGZELL.
10th February 1863.

364. MONTAGUE WIGZELL, of the Strand, Topsham, in the County of Devon, for an invention for—"Improvements in machinery or apparatus and method to be used in the manufacture of every description of candles, tapers and other lights." *Letters Patent sealed.*

CARTWRIGHT.
10th February 1863.

365. MATTHEW CARTWRIGHT, of Hoxton, in the County of Middlesex, Dentist, for an invention for—"Improvements in combining plastic substances with metals." *Letters Patent sealed.*

BOTTOM.
10th February 1863.

366. JOHN FRANCIS BOTTOM, of Nottingham, Lace Dresser, for an invention for —"Improvements in means or apparatus for dressing lace and other fabrics." *Letters Patent sealed.*

WHITAKER. TONGUE.
10th February 1863.

367. WILLIAM WHITAKER, of Bradford, in the County of York, Merchant, and WILLIAM TONGUE, of the same place, Engineer, for an invention for—"Improvements in apparatus and processes for steeping, boiling, washing, bleaching and dyeing fibrous materials or slivers, slubbings, rovings, yarns or woven fabrics of the same." *Letters Patent sealed.*

CORNEAU.
11th February 1863.

368. ALFRED CORNEAU, of Charleville, in the Empire of France, Iron Founder, for an invention for—"An improved hot air stove." *Letters Patent sealed*

DONALD.
11th February 1863.

369. HUGH DONALD, of the firm of Craig and Donald, of Johnstone, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in machinery for shearing, punching and riveting metals." *Letters Patent sealed.*

HUGHES.
11th February 1863.

370. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in apparatus for drilling wood, stone, iron or other materials."—*A communication to him from abroad by Joseph Julien Chenal, of Maillat (Ain), France.* *Letters Patent sealed.*

DUCKWORTH.
11th February 1863.

371. JOHN DUCKWORTH, of Pilkington, near Manchester, in the County of Lancaster, Size Manufacturer, for an invention for—"Improvements in the manufacture of paper." *Letters Patent sealed.*

RADCLIFFE.
11th February 1863.

372. DAVID RADCLIFFE, of Liverpool, in the County of Lancaster, Plumber, for an invention for—"Improvements in valve taps." *Provisional protection only.*

CARTER.
11th February 1863.

373. CHARLES PEMBERTON CARTER, of Kennington Hall, in the County of Kent, Esquire, for an invention for—"Improvements in pavements for roads, streets or ways." *Provisional protection only.*

SAUNDERS.
11th February 1863.

374. ROBERT SAUNDERS, of Croydon, in the County of Surrey, Gentleman, for an invention for—"Improvements in pavements and floors, which improvements are applicable also to stairs and steps." *Letters Patent sealed.*

SYMINGTON.
11th February 1863.

375. WILLIAM SYMINGTON, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in weaving and in apparatus therefor." *Letters Patent sealed.*

BROOMAN.
11th February 1863.

376. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in photographic apparatus."—*A communication to him from abroad by Jean Jacques Leopold Rousseau de Lafarge, of Paris, France.* *Letters Patent sealed.*

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HUMPHRYS. 11th February 1863. — **377.** EDWARD HUMPHRYS, of Deptford, in the County of Kent, for an invention for—"Improvements in apparatus for steering ships." *Provisional protection only.*

WYCHERLEY. 11th February 1863. — **378.** HENRY WYCHERLEY, Carriage Builder, of Oldbury, in the County of Worcester, and West Bromwich, in the County of Stafford, for an invention for—"Certain improvements in the construction of and mode of applying wings or dirt screens over the wheels of carriages." *Letters Patent sealed.*

OPPENHEIM. 12th February 1863. — **379.** FREDERICK OPPENHEIM, of 379, Strand, in the County of Middlesex, for an invention for—"An improved plastic compound for dental purposes, to be used instead of wax, gutta-percha, or resinous gums, in taking the impression of the mouth."—*The result partly of a communication from abroad made to him by Edward Billard, of Paris, in the Empire of France, and partly of an invention and discovery made by himself.* *Provisional protection only.*

KEMP. NEEDHAM. ROBINSON. 12th February 1863. — **380.** EMANUEL KEMP, Manager, JAMES NEEDHAM, and ORLANDO ROBINSON, Overlookers, all of Ashton-under-Lyne, in the County of Lancaster, for an invention for—"Certain improvements in self-acting mules for spinning." *Provisional protection only.*

MORTON. 12th February 1863. — **381.** ALEXANDER MORTON, of Arbroath, in the County of Forfar, Engineer, for an invention for—"Improvements in lawn mowing machines."—*Provisional protection only.*

CLARK. 12th February 1863. — **382.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the bearing surfaces of shafts and other axles."—*A communication to him from abroad by Nicolas Bailly and Charles Durand, both of Paris, in the Empire of France.* *Provisional protection only.*

PHILLIPS. 12th February 1863. — **383.** SAMUEL HENRY PHILLIPS, of the firm of Faudel, Phillips and Sons, of Newgate Street, in the City of London, for an invention for—"An improved fastening for purses, portemonnaies, pocket books, bags, reticules and such like purposes." *Provisional protection only.*

LUMB. SPINK. 12th February 1863. — **384.** SAMUEL LUMB, of Whitehall Works, Leeds, Engineer and Machine Maker, and JOHN SPINK, of Oxford Road, Sheffield, Joiner, both in the County of York, for an invention for—"Improvements in machinery for tenoning, grooving, sawing and otherwise cutting wood." *Provisional protection only.*

BIRKBECK. 13th February 1863. — **385.** GEORGE HENRY BIRKBECK, of the firm of Tongue & Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agents and Engineers, for an invention for—"Improvements in processes or means employed for separating or extracting silver or other metals from lead."—*A communication to him from abroad by M. Clement Roswag, Engineer, of Paris, in the Empire of France.* *Letters Patent sealed.*

INNES. 13th February 1863. — **386.** STEPHEN MOUNTCASHEL INNES, of Hill House Hill, in the Parish of Millbrook, in the County of Hampshire, for an invention for—"Improvements in the construction of piano-fortes." *Letters Patent sealed.*

GEDGE. 13th February 1863. — **387.** WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved table apparatus for promoting the comfort of persons at sea."—*A communication to him from abroad by Hyacinte Clare, of the Rue du Faubourg St. Martin, Paris, France.* *Provisional protection only.*

JONES. 13th February 1863. — **388.** JABEZ JONES, of Liverpool, in the County of Lancaster, Lead Merchant, for an invention for—"Improvements in the manufacture of lead, tin and other metals or amalgamation of metals of a like fusible nature, into sheets of any required thickness and length, and also coating one or both sides of pipes and sheets of lead and other metal or amalgamation of metals, with tin or other substances, and in the apparatus connected therewith. *Letters Patent sealed.*

SPENCER. 13th February 1863. — **389.** JOHN FREDERICK SPENCER, of Newcastle-on-Tyne, in the County of Northumberland, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

ROBERTSON. 13th February 1863. — **390.** JAMES ROBERTSON, Foreman Printer to Messieurs Archibald Orr, Ewing and Company, of Levenbank Print Works, in the County of Dumbarton, North Britain, for an invention for—"Improvements in apparatus or means for printing woven fabrics by blocks." *Letters Patent sealed.*

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GRANTHAM. 13th February 1863.

391. JOHN GRANTHAM, of 31, Nicholas Lane, in the City of London, Civil Engineer, for an invention for—"Improvements in hydraulic presses."
Letters Patent sealed.

ROBERTSON. 13th February 1863.

392. WILLIAM ROBERTSON, of the City of Manchester, Mechanical Engineer, for an invention for—"Improvements in machines for spinning and doubling."
Letters Patent sealed.

WRIGLEY. MORRIS. 13th February 1863.

393. GEORGE WRIGLEY, of the firm of Messieurs Cryer and Lees, of Dukinfield, in the County of Chester, Machine Makers, and SAMUEL MORRIS, of the same place, Mechanic, for an invention for—"Improvements in machines for spinning and doubling."
Letters Patent sealed.

HODGE. 13th February 1863.

394. OLIVER HICKS HODGE, of Shoreditch, in the County of Middlesex, Hat Maker, for an invention for—"Improvements in hat brims, in the manufacture of hat brims, and in the apparatus or machinery used in such manufacture."
Letters Patent sealed.

SCHLUMBERGER. 13th February 1863.

395. JULES ALBERT SCHLUMBERGER, of Golden Square, in the County of Middlesex, Chemist, for an invention for—"Improvements in treating coal tar dead oils and for producing phenic or carbolic acid."—*A communication to him from abroad by Jean Jaques Müller, of Bale, Switzerland.* *Letters Patent sealed.*

WHITAKER. 13th February 1863.

396. SAMUEL WHITAKER, of Craddock Street, Haverstock Hill, in the County of Middlesex, Electrician, for an invention for—"Improvements in indicating the positions or conditions of railway signals and points, and in the apparatus employed therein."
Letters Patent sealed.

HASELTINE. 14th February 1863.

397. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in lever horse power machines, the cog gearing employed being applicable to other machines."—*A communication to him from abroad by Cyrus Avery, of Philadelphia, State of Pennsylvania, United States of America.*
Provisional protection only.

BAGULEY. 14th February 1863.

398. ROWLAND BAGULEY, of Greenlow Mill, Blackburn, in the County of Lancaster, Shuttle Manufacturer, for an invention for—"Improvements in the construction of creels for warping-machines and other machines to which creels are applied."
Provisional protection only.

JEFFCOTT. 14th February 1863.

399. JOHN CRONIN JEFFCOTT, of Anglesea Street, Cork, Ireland, for an invention for—"Improvements in the production and generation of gases, and also in the apparatus connected therewith."
Letters Patent sealed.

PAUL. SHORE. 14th February 1863.

400. WILLIAM CRANE PAUL, and ALFRED THOMAS SHORE, both of Queen's Road, Bayswater, County of Middlesex, Upholsterers, for an invention for—"Improvements in the mode of constructing spring mattrasses and other such articles for sitting and reclining upon."
Letters Patent sealed.

GISBORNE. SIMPSON. 14th February 1863.

401. JOHN SACHEVERELL GISBORNE, of Birkenhead, in the County of Chester, Electrical Engineer, and WILLIAM SIMPSON, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in means for rendering ships' and other compasses insensible to local attraction."
Letters Patent sealed.

DEMBINSKI. 14th February 1863.

402. HENRI DEMBINSKI, of Rue de l'Oratoire du Roule, No. 13, Paris, in the Empire of France, General, for an invention for—"A new motive apparatus and processes proper for giving to it a continuous motion and unlimited strength."
Provisional protection only.

BAYLIS. HOPWOOD. 14th February 1863.

403. WILLIAM BAYLIS, Joiner, of Hulme, in the City of Manchester, in the County of Lancaster, and THOMAS HENRY HOPWOOD, Hosier and Engineer, of the same place, for an invention for—"Improvements in tongs or forceps for grasping articles out of reach of the hand."
Letters Patent sealed.

WOOD. 14th February 1863.

404. WILLIAM WOOD, of Ashton-under-lyne, in the County of Lancaster, Manager, for an invention for—"Certain improvements in cutting or producing screws or threads and in apparatus connected therewith.
Provisional protection only.

LEWIS. 14th February 1863.

405. JAMES LEWIS, of No. 5, Wych Street, Strand, in the County of Middlesex, Engineer and Model Maker, for an invention for—"Improvements in driving sewing-machines."
Provisional protection only.

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WALSH.
14th February 1863.

406. JOHN HENRY WALSH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms and in the cartridge cases to be used therewith." *Provisional protection only.*

THORNE.
14th February 1863.

407. THOMAS THORNE, of Southsea, in the County of Hants, Carpenter, for an invention for—"Improved apparatus for disengaging ships' boats." *Provisional protection only.*

CLARK.
14th February 1863.

408. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the method of and apparatus for separating the fibres of straw, wood and other vegetable substances, and extracting the gummy and coloring matters therefrom, to render them fit for paper stock or for other purposes."—*A communication to him from abroad by Azel Storrs Lyman, of New York, United States of America.* *Letters Patent sealed.*

FRASER.
14th February 1863.

409. ALEXANDER JOHN FRASER, of Water Lane, Great Tower Street, in the City of London, for an invention for—"Improvements in window furniture or fastenings." *Provisional protection only.*

HIGGINS.
HIGGINS.
14th February 1863.

410. JAMES HIGGINS, and HENRY HIGGINS, of Salford, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in carding-engines and in apparatus connected therewith." *Letters Patent sealed.*

WALKER.
14th February 1863.

411. FRANK EMSDORFF WALKER, of James's Terrace, Waterloo Road, in the County of Surry, Gunmaker, for an invention for—"Improvements in the construction of breech-loading fire-arms." *Letters Patent sealed.*

MORGAN.
14th February 1863.

412. JOHN MORGAN, of 23, Stephen's Green North, in the City of Dublin, Esquire, F.R.C.S.I., for an invention for—"Improvements in embalming and preserving from decay human bodies and bodies of other animals, also pickling, curing and flavoring animal bodies." *Letters Patent sealed.*

JOHNSON.
14th February 1863.

413. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in wrought-iron casements and in the means for fastening the same, which improvements are also partly applicable to the framework of glass doors, conservatories and similar structures."—*A communication to him from abroad by Louis Pierre, Vincent Etienne Eugene Jacquemin, Jean Charles Douriez and Gustav Joseph Legros, of Paris, in the Empire of France.* *Letters Patent sealed.*

OHREN.
16th February 1863.

414. MAGNUS OHREN, of Sydenham, in the County of Kent, Associate of the Institution of Civil Engineers, for an invention for—"Improvements in the construction of gas holders and in the mode of rendering gas holders self-acting." *Complete specification; protection for* SIX MONTHS *only.*

CROSSLEY.
16th February 1863.

415. JAMES WILLIAM CROSSLEY, of Brighouse, in the County of York, Dyer and Finisher, for an invention for—"Improvements in press papers and in the method or means of drying them and other similar sheets of paper, applicable also for the drying of woven fabrics, yarns, wool, cotton or other fibrous substances." *Letters Patent sealed.*

ABEL.
16th February 1863.

416. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"An improved omnibus."—*A communication to him from abroad by Justin François Audineau, residing at Bordeaux, in the Empire of France.* *Letters Patent sealed.*

MCENTEE.
WITHERS.
WITHERS.
16th February 1863.

417. WILLIAM CHARLES MCENTEE, of Birmingham, in the County of Warwick, Merchant, and GEORGE WITHERS, of West Bromwich, in the County of Stafford, Fireproof Safe Manufacturer, and THOMAS WITHERS, of West Bromwich, aforesaid, Fireproof Safe Manufacturer, for an invention for—"Improvements in locks." *Letters Patent sealed.*

WATTS.
16th February 1863.

418. JOHN BURCHLEY WATTS, of Birmingham, in the County of Warwick, Sword and Bayonet Manufacturer, for an invention for—"Improvements in the manufacture of matchets and swords." *Provisional protection only.*

SMITH.
16th February 1863.

419. HUGH SMITH, of No. 3, Regent's Park Terrace, Gloucester Gate, in the County of Middlesex, for an invention for—"Improvements in apparatus for feeding horses." *Provisional protection only.*

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BROOMAN. 16th February 1863.

420. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved cover or protection for steel and other metal springs, ribbands and hoops."—*A communication to him from abroad by Eugene Lange, of Paris, France.* *Letters Patent sealed.*

JACKSON. 16th February 1863.

421. WILLIAM JACKSON, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in pumps." *Provisional protection only.*

HAYWOOD. VERNON. 16th February 1863.

422. JOHN HARRINGTON HAYWOOD, and WILLIAM VERNON, both of the Town and County of the Town of Nottingham, Lace Manufacturers, for an invention for—"Improvements in packing bonnet fronts, ronches and other similar articles." *Provisional protection only.*

CLOUGH. 16th February 1863.

423. SAMUEL WESLEY CLOUGH, of Stanningley, in the County of York, Manager, for an invention for—"Improvements in signalling on railways." *Letters Patent sealed.*

NALDER. 16th February 1863.

424. WILLIAM NALDER, of Challow Works, Wantage, in the County of Berks, Engineer and Agricultural Implement Manufacturer, for an invention for—"Improvements in rotatory screens and in the machinery or apparatus employed in the manufacture of such screens." *Letters Patent sealed.*

WILKINSON. 16th February 1863.

425. THOMAS WILKINSON, of Rathmines, in the County of Dublin, Commercial Clerk, for an invention for—"Improvements in machinery or apparatus for singeing pigs." *Provisional protection only.*

SALMON. 17th February 1863.

426. THOMAS WILSON SALMON, of Mile End Old Town, in the County of Middlesex, Mechanic, for an invention for—"Improvements in washing-machines." *Letters Patent sealed.*

LEE. 17th February 1863.

427. JESSE LEE, of Church Gate, in the Borough of Leicester, for an invention for—"Improvements in ploughs and harrows." *Provisional protection only.*

DIBB. 17th February 1863.

428. WILLIAM THOMAS DIBB, of Hull, in the County of York, Brewer, for an invention for—"An improvement in brewing." *Provisional protection only.*

FORD. 17th February 1863.

429. WILLIAM CHARLES FORD, of Brooklyn, in the County of Kings, and State of New York, United States of America, for an invention for—"An improvement in paddle wheels." *Provisional protection only.*

GIMSON. 17th February 1863.

430. JOSIAH GIMSON, of Leicester, Mechanical Engineer, for an invention for—"Improvements in presses for punching or cutting out leather and other substances." *Letters Patent sealed.*

DEVILLE. 17th February 1863.

431. ESTÈVE DEVILLE, of Rue Blanche, No. 95, Paris, in the Empire of France, Proprietor, for an invention for—"Improvements in floating or life preserving coats or garments."—*A communication to him by Jean Louis Vergniais, a person resident at No. 23, Rue Neuve Sainte Catherine, Paris, Civil Engineer.* *Letters Patent sealed.*

DURRANT. 17th February 1863.

432. JAMES DURRANT, of Sussex Street, St. Pancras, in the County of Middlesex, Engineer, for an invention for—"Improvements in chimney tops." *Letters Patent sealed.*

HOME. 17th February 1863.

433. GEORGE HOME, of Kensall Green, in the County of Middlesex, for an invention for—"Improvements in projectiles." *Provisional protection only.*

LANE. 17th February 1863.

434. JAMES WAKEMAN LANE, of Caledonian Road, in the County of Middlesex, Watchmaker, for an invention for—"Improvements in fastenings for studs, sleeve fasteners, solitaires, bracelets, brooches and other uses." *Provisional protection only.*

PLUCHART. 17th February 1863.

435. STANISLAS PLUCHART, of Paris, France, Gentleman, for an invention for—"A new kind of food for horses." *Provisional protection only.*

TOMLINSON. 17th February 1863.

436. HENRY TOMLINSON, of Rotherham, in the County of York, Stove Grate Manufacturer, for an invention for—"Improvements in stoves or fire places for warming apartments." *Provisional protection only.*

TASSIN. 17th February 1863.

437. DESIRÉ TASSIN, of No. 30, Rue du College, Liége, in the Kingdom of Belgium, Engineer, for an invention for—"Improvements in preventing the explosion of steam-boilers." *Letters Patent sealed.*

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STRAWSON.
18th February 1863.

438. EDWARD STRAWSON, of No. 9, Royal Arcade, New Oxford Street, London, in the County of Middlesex, Agent for Patent Sewing Machines, Machine Needles, etc., for an invention for—"Improvements in the manufacture of buttons which may be instantaneously attached without sewing." *Letters Patent sealed.*

GEYELIN.
18th February 1863.

439. GEORGE KENNEDY GEYELIN, Civil Engineer, of 13, Chenies St., London, W.C., for an invention for—"An improved grate whereby the perfect combustion of the various compounds of coal is produced." *Provisional protection only.*

SIÉGRIST.
18th February 1863.

440. MICHEL SIÉGRIST, of Ewell, in the County of Surrey, Gentleman, for an invention for—"An improved atmospheric brake or break." *Provisional protection only.*

BARKER.
MOSS.
18th February 1863.

441. JOHN BARKER, and EDMUND MOSS, of the City of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in portable and stationary crabs or cranes." *Provisional protection only.*

SPENCER.
18th February 1863.

442. JOHN FREDERICK SPENCER, of Newcastle-upon-Tyne, Consulting Engineer, for an invention for—"Improvements in apparatus for regulating and working the valves of steam and other engines." *Letters Patent sealed.*

BLY.
18th February 1863.

443. JOHN HENRY BLY, of Great Yarmouth, in the County of Norfolk, Ironmonger, for an invention for—"Improvements in cooking-stoves. *Letters Patent sealed.*

JOHNSTON.
HEATLEY.
18th February 1863.

444. FRANCIS JOHNSTON, Manufacturer, and ROBERT HEATLEY, Overlooker, both of Blackburn, in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

PLATT.
RICHARDSON.
18th February 1863.

445. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in machinery or apparatus for cleaning cotton from seeds." *Provisional protection only.*

BOUSFIELD.
18th February 1863.

446. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in breech-loading fire-arms." —*A communication to him from abroad by Isaac Hartshorn, a person resident at Providence, in the State of Rhode Island, United States of America.* *Letters Patent sealed.*

REED.
18th February 1863.

447. FREDERIC JOHN REED, of No. 3, Gresham Street, in the City of London, for an invention for—"Improvements in apparatus for traversing guns."—*A communication to him from abroad by Joseph Atkinson Yates, a person resident at Charleston, in the State of South Carolina.* *Letters Patent sealed.*

BOUSFIELD.
18th February 1863.

448. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of boots and shoes, and in preparing india-rubber for such and other uses."—*A communication to him from abroad by Daniel Hayward, a person resident at Boston, in the United States of America.* *Letters Patent sealed.*

PUNTIS.
COX.
18th February 1863.

449. JOSIAH PUNTIS, of Above Bar, Southampton, in the County of Hants, and GEORGE COX, of Throgmorton Street, in the City of London, for an invention for—"Improved appliances for displaying in the open air or in doors illuminated designs, devices, mottoes or announcements, and in which jets of gas are employed as the illuminating agent." *Letters Patent sealed.*

GRAY.
HUDSON.
18th February 1863.

450. JOHN GRAY, and JOSEPH HUDSON, both of 4, Botolph Lane, E.C., for an invention for—"Improvements in the treatment of steatite and in its application to certain purposes." *Provisional protection only.*

ROBERTS.
19th February 1863.

451. RICHARD PERCY ROBERTS, of Kennington Oval, in the County of Surrey, for an invention for—"Improved axle boxes for carriages or vehicles."—*A communication to him from abroad by James A. Cramer, of Brooklyn, of the State of New York, United States of America.* *Provisional protection only.*

MARKLAND.
DICKINSON.
19th February 1863.

452. THOMAS MARKLAND, of Hyde, in the County of Chester, and JOHN CHARLES DICKINSON, of Blackburn, in the County of Lancaster, Machine Maker, for an invention for—"Certain improvements in machinery or apparatus for warping or beaming yarns or threads." *Letters Patent sealed.*

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SHERWOOD. 19th February 1863.

453. WILLIAM SHERWOOD, of the firm of John Sherwood and Sons, of Birmingham, in the County of Warwick, Silversmiths, for an invention for—"An improvement or improvements in wine glasses." *Provisional protection only.*

POUGET. 19th February 1863.

454. LOUIS AUGUSTE POUGET, of No. 39, Rue St. Sébastien, Paris, in the Empire of France, Lamp Manufacturer, for an invention for—"Improvements in the manufacture of oil lamps." *Provisional protection only.*

PINKNEY. 19th February 1863.

455. ROBERT PINKNEY, of 18, Bread Street Hill, in the City of London, Wholesale Stationer, for an invention for—"Improvements in the manufacture of metallic pens." *Provisional protection only.*

BADART. 19th February 1863.

456. JEAN JOSEPH BADART, of No. 95, Bishopsgate Street, in the City of London, for an invention for—"Improvements in the preparation of cotton seed cake." *Letters Patent sealed.*

TRUSTRUM. 19th February 1863.

457. WILLIAM TRUSTRUM, of No. 2, Marlborough Road, Old Kent Road, in the County of Surrey, for an invention for—"Improvements in the manufacture of oiled silk." *Letters Patent sealed.*

THOMPSON. 19th February 1863.

458. NATHAN THOMPSON, of 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in apparatus for stopping bottles, jars and other vessels, and in tools for producing parts of such apparatus." *Letters Patent sealed.*

BARLOW. 20th February 1863.

459. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Certain improvements in weaving and in the machinery employed therein."—*A communication to him from abroad by Edme Hippolyte Junot, of Paris, in the Empire of France, Manufacturer.* *Letters Patent sealed.*

MARSDEN. 20th February 1863.

460. WILLIAM MARSDEN, of 49, Old Bailey, in the County of Middlesex, for an invention for—"Improvements in envelopes." *Provisional protection only.*

MARSDEN. 20th February 1863.

461. WILLIAM MARSDEN, of 49, Old Bailey, in the County of Middlesex, for an invention for—"Improvements in buttons and other similar fastenings, and in the modes of attaching or securing the same." *Letters Patent sealed.*

BILLINGSLEY. 20th February 1863.

462. CHARLES BILLINGSLEY, of the City of Manchester, in the County of Lancaster, Saddler, for an invention for—"Improvements in saddlery, harness, driving straps and similar articles." *Letters Patent sealed.*

BENTLEY. BOOTH. 20th February 1863.

463. JOHN BENTLEY, Manufacturer, and HUGH BOOTH, Overlooker, both of Pilkington, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

SIEMENS. 20th February 1863.

464. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in insulating and supporting telegraph line wires." *Letters Patent sealed.*

HAINSWORTH. 20th February 1863.

465. WILLIAM HAINSWORTH, at present of Rothwell, near Wakefield, in the County of York, Founder, for an invention for—"Improvements in the manufacture of cast iron pipes, columns, or any description of tubing." *Provisional protection only.*

BELL. 20th February 1863.

466. RICHARD BELL, of Gracechurch Street, in the City of London, Architect, for an invention for—"Improvements in armour plating or protecting ships and vessels." *Letters Patent sealed.*

CLARK. 20th February 1863.

467. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improvement in boilers for disintegrating and pulping vegetable substances."—*A communication to him from abroad by William Fittock Ladd, of Tarrytown, Westchester County, State of New York, and Samuel Armstrong Walsh, of New York City, United States of America, Paper Stock Boiler.* *Letters Patent sealed.*

CLARK. 20th February 1863.

468. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in projectiles for ordnance."—*A communication to him from abroad by Charles Wesley Stafford, of Burlington des Moines County, State of Iowa, United States of America.* *Letters Patent sealed.*

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BENNDORF. 20th February 1863.

469. FRIEDRICH WILLIAM BENNDORF, of Chemnitz, in the Kingdom of Saxony (Germany), for an invention for—"Improvements in governors or apparatus for regulating the speed of steam-engines or other engines for driving machinery."
Provisional protection only.

HUSBAND. QUICK. 20th February 1863.

470. WILLIAM HUSBAND, of Hayle, in the County of Cornwall, and JOSEPH QUICK, of Sumner Street, Southwark, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in apparatus for raising sewage and water."
Provisional protection only.

MALPAS. 21st February 1863.

471. CHARLES MALPAS, of Soho Mills, Tunstall, in the County of Stafford, for an invention for—"Improvements in ovens or kilns for firing, burning or baking pottery, bricks, tiles and other earthen or ceramic articles." *Letters Patent sealed.*

THOMPSON. 21st February 1863.

472. ROBERT THOMPSON, of the Haigh Foundry, Wigan, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for moulding."
Provisional protection only.

KILSHAW. ELCE. 21st February 1863.

473. HENRY KILSHAW, of Haslingden, in the County of Lancaster, Cotton Spinner and Manufacturer, and THOMAS ELCE, junior, of the City of Manchester, Machine Maker, for an invention for—"Certain improvements in machinery for preparing and doubling cotton and other fibrous substances." *Letters Patent sealed.*

MANCEAUX. 21st February 1863.

474. FRANÇOIS JULES MANCEAUX, of Paris, in the Empire of France, Gun Manufacturer, for an invention for—"Improvements in fire-arms or in transforming arms of large calibre into arms of smaller calibre." *Letters Patent sealed.*

HUGHES. 21st February 1863.

475. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the treatment of colouring matters derived from tar, for the purpose of making them applicable for painting.—*A communication to him from abroad by Barthelemy Dupuy and Antoine Vibert, of Lyons, in the Empire of France.* *Letters Patent sealed.*

DODWELL. 21st February 1863.

476. ROBERT VALENTINE DODWELL, of Manchester, in the County of Lancaster, District Engineer to the Magnetic Telegraph Company, for an invention for—"An improved method of preventing the destruction of plants by insects and certain descriptions of animals, and in the means for effecting the same."
Provisional protection only.

RÉMOND. 21st February 1863.

477. ALFRED HENRY RÉMOND, of No. 4, Moorgate Street, in the City of London, for an invention for—"Improvements in preserving provisions and in the apparatus employed for such purpose." *Provisional protection only.*

CEILEUR. 21st February 1863.

478. ALBERT CEILEUR, of Shawbury Villas, Camden Road, in the County of Middlesex, Photo-lithographer, for an invention for—"Improvements in apparatus for taking photographic impressions or likenesses by means of the camera."
Provisional protection only.

WOOD. 21st February 1863.

479. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the process of manufacturing pomfret or liquorice cakes, rolls, sticks and pipes, and other similar articles of confectionery."
Letters Patent sealed.

MACKINDER. 21st February 1863.

480. HERBERT MACKINDER, of Mere Hall, Lincoln, for an invention for—"Improvements in apparatus for separating potatoes into different sizes."
Letters Patent sealed.

BROWN. 21st February 1863.

481. JOHN BROWN, of the Atlas Steel and Iron Works, Sheffield, in the County of York, for an invention for—"Improvements in the manufacture of armour plates for ships and other structures."—*A communication to him from abroad by Alexander Holley, a person resident at the City of New York, in the United States of America.*
Letters Patent sealed.

DUGDALE. 21st February 1863.

482. ANTHONY DUGDALE, of Rue de Courcelles, Paris, in the Empire of France, Engineer, for an invention for—"Improvements in throttle valves."
Letters Patent sealed.

NEWTON. 21st February 1863.

483. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of wind instruments of music."—*A communication to him from abroad by Ambroise Santucci, of Rue St. Sebastien, Paris, in the Empire of France.*
Provisional protection only.

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WIARD.
21st February 1863.

484. NORMAN WIARD, of New York City, in the County and State of New York, in the United States of America, for an invention for—"Improvements in ordnance and artillery, and means of operating and mounting the same, and in projectiles and instruments therefor." *Provisional protection* NOT *granted.*

GAUNTLETT.
23rd February 1863.

485. WILLIAM HENRY GAUNTLETT, of the South Bank Iron Works, Middlesbro'-on-Tees, in the North Riding of the County of York, Engineer, for an invention for —"Improvements in apparatus for heating the blast in the manufacture of iron." *Letters Patent sealed.*

HUGHES.
23rd February 1863.

486. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the process of cleaning organic matter."—*A communication to him from abroad by François Théophile Moison, of* 13, *Rue Gaillon, Paris, Chemist.* *Provisional protection only.*

ECKERSLEY.
23rd February 1863.

487. JAMES ECKERSLEY, of Westhoughton, in the County of Lancaster, Mechanic, for an invention for—"Improvements in spinning and doubling silk." *Provisional protection only.*

BROOMAN.
23rd February 1863.

488. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in dressing millstones, in ornamenting or engraving on glass, pottery and other similar substances, and in materials employed therein."—*A communication to him from abroad by Cyprien Marie Tessié du Motay and Charles Raphael Maréchal, both of Metz, France.* *Letters Patent sealed.*

DATICHY.
23rd February 1863.

489. JEAN PIERRE FLORIMOND DATICHY, of Margaret Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

WELCH.
WELCH.
23rd February 1863.

490. JOHN DAVIS WELCH, and ALFRED PHIPPEN WELCH, both of Gutter Lane, in the City of London, and of Luton, in the County of Bedford, Straw Hat Manufacturers, for an invention for—"Improvements in machinery for blocking and pressing hats and bonnets." *Letters Patent sealed.*

MARTINDALE.
23rd February 1863.

491. RALPH MARTINDALE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in lamps and burners, and in apparatus employed for milling or ornamenting parts of lamps, which apparatus may also be applied to other similar uses." *Letters Patent sealed.*

HARDING.
23rd February 1863.

492. THOMAS RICHARDS HARDING, of Leeds, in the County of York, Hackle Pin Manufacturer, for an invention for—"Improvements in machinery for carding and combing flax, wool, cotton and other fibrous substances." *Letters Patent sealed.*

DICKENS.
DICKENS.
HEYWOOD.
23rd February 1863.

493. THOMAS DICKENS, ALBERT LUNGLEY DICKENS, and HARVEY HEYWOOD, of Middleton, in the County of Lancaster, Dyers and Printers, for an invention for—"Improvements in ornamenting plush and other such textile fabrics." *Letters Patent sealed.*

TATHAM.
23rd February 1863.

494. JOHN TATHAM, of Rochdale, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning." *Letters Patent sealed.*

ERWOOD.
23rd February 1863.

495. JOHN ERWOOD, of 91, Goswell Street, in the County of Middlesex, Paper Stainer, for an invention for—"Improvements in producing imitation gilding on paper hangings and other surfaces, also in metal leaf and metallic or bronze powder suitable for the purpose." *Provisional protection only.*

MASTERS.
24th February 1863.

496. HENRY MASTERS, of Bristol, in the City and County of Bristol, Architect and Civil Engineer, for an invention for—"Improvements in spools, bobbins, rollers and similar articles." *Provisional protection only.*

SPINK.
24th February 1863.

497. DANIEL SPINK, of Spaxton, near Bridgewater, in the County of Somerset, Esquire, for an invention for—"Improvements in the construction and arrangement of armour plates for ships." *Provisional protection only.*

WHITEHEAD.
WHITEHEAD.
BARBER.
24th February 1863.

498. WILLIAM WHITEHEAD, HENRY WHITEHEAD, and HENRY BARBER, Spring Knife Cutlers, all in the Township of Ecclesall Bierlow, Sheffield, in the County of York, for an invention for—"Improvements in the manufacture and securing of cutlery handles and machinery employed therein." *Letters Patent sealed.*

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CLAY.
24th February 1863.

499. JOHN CLAY, of Sparkhill, near Birmingham, in the County of Warwick, Saddler, for an invention for—"Improvements in the manufacture of saddles."
Letters Patent sealed.

HAWTHORN.
24th February 1863.

500. JOHN HAWTHORN, of Burslem, in the County of Stafford, China Manufacturer, for an invention for—"Certain improvements in handles for doors, drawers and other means of enclosure."
Letters Patent sealed.

DAVIES.
24th February 1863.

501. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improvement in melting and smelting furnaces."—*A communication to him from abroad by James Fletcher Stileman and Zabina Ellis, both of Philadelphia, Pennsylvania, in the United States of America.*
Letters Patent sealed.

GEDGE.
24th February 1863.

502. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of hats."—*A communication to him from abroad by Guillaume Madelaine Lacaze (of the firm of Guillaume Madelaine Lacaze, père, and Company, Hat Manufacturers), 15, Passage des Petites Ecuries, Paris, France.*
Provisional protection only.

BURTON.
24th February 1863.

503. JOHN WATSON BURTON, of Leeds, in the County of York, Gentleman, for an invention for—"Improvements in the bearings and bushes of axles and shafts."
Letters Patent sealed.

LE BUTT.
24th February 1863.

504. JOSIAH LE BUTT, of Bury St. Edmunds, in the County of Suffolk, for an invention for—"Improvements in machinery for dressing grain."
Provisional protection only.

HOOPER.
24th February 1863.

505. WILLIAM HOOPER, of the London India-rubber Works, Mitcham, in the County of Surrey, for an invention for—"Improvements in insulating and protecting telegraphic and other wires and rods, and in machinery connected therewith."
Letters Patent sealed.

CHATTERTON.
24th February 1863.

506. DAVID BANNISTER CHATTERTON, of Chester, in the County of Chester, Mechanical Engineer, for an invention for—"Improved brick making machinery."
Provisional protection only.

WALKER.
24th February 1863.

507. EDWARD ROSS WALKER, of Haigh, near Wigan, in the County of Lancaster, Engineer, for an invention for—"Improvements in valves and in apparatus connected therewith."
Letters Patent sealed.

WILLSON.
24th February 1863.

508. HUGH BOWLSBY WILLSON, of Quebec, Lower Canada, but now residing at Montague Place, Russell Square, in the County of Middlesex, Barrister-at-Law, for an invention for—"Improvements in the construction of war and merchant ships."
Provisional protection only.

HUDDART.
24th February 1863.

509. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Carnarvon, Gentleman, for an invention for—"Improved means of imparting heat to fluids."
Provisional protection only.

JUNGER.
24th February 1863.

510. AUGUSTUS JUNGER, of Hamburg, Tailor, for an invention for—"An improved life preserving garment.
Letters Patent sealed.

MALLINSON.
LIVINGSTON.
24th February 1863.

511. THOMAS MALLINSON, of the firm of Fleming, Mallinson and Company, Machine Makers, of Globe Works, in the City of Manchester, and County of Lancaster, and JOHN LIVINGSTON, of the same place, Mechanic, for an invention for—"Improvements in throstle spinning and doubling frames, wholly or partly applicable to roving and slubbing frames."
Provisional protection only.

THOMSON.
24th February 1863.

512. ROBERT WILLIAM THOMSON, of Edinburgh, in the County of Mid-Lothian, North Britain, Civil Engineer, for an invention for—"Improvements in obtaining and applying motive-power, which improvements or parts thereof are applicable for raising, forcing and measuring fluids."
Letters Patent sealed.

BOWER.
HOLLINSHEAD.
24th February 1863.

513. GEORGE BOWER, of St. Neots, in the County of Huntingdon, Gas Engineer, and WILLIAM HOLLINSHEAD, of the same place, Engineer, for an invention for—"Improvements in apparatus for the production and transmission of gas or other fluids."
Letters Patent sealed.

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CLARK. 24th February 1863.

514. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in reefing and furling machines."—*A communication to him from abroad by Frederick William Grote and Claus Ortgiers Tietjen, both of New York City, United States of America.*
Letters Patent sealed.

LAPTHORN. 24th February 1863.

515. WILLIAM HENRY LAPTHORN, of Broad Street, Portsmouth, in the County of Hants, Ship Chandler, for an invention for—"Improvements in reefing and furling ships' square sails."
Provisional protection only.

WILDE. 25th February 1863.

516. HENRY WILDE, of the City of Manchester, Engineer, for an invention for—"Improvements in electro-magnetic telegraphs."
Letters Patent sealed.

GATTY. 25th February 1863

517. FREDERICK ALBERT GATTY, of Accrington, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in printing and dyeing cotton and other fabrics."
Letters Patent sealed.

MAYNARD. 25th February 1863.

518. ROBERT MAYNARD, of Whittlesford, in the County of Cambridge, for an invention for—"Improvements in portable chaff-cutting machines."
Letters Patent sealed.

BROOMAN. 25th February 1863.

519. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in lamps for burning petroleum and other similar oils, and in feeders or cans for supplying such oils to lamps."—*A communication to him from abroad by Noel Bosselut, of Paris, France.*
Letters Patent sealed.

FITTER. 25th February 1863.

520. JOSEPH FITTER, of Birmingham, in the County of Warwick, Machinist, for an invention for—"An improvement or improvements in the construction of castors for tables, chairs and other furniture or other articles."
Letters Patent sealed.

READMAN. 25th February 1863.

521. WILLIAM READMAN, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of carbonate of magnesia and of iodine and kelp salt and other products from kelp."
Letters Patent sealed.

WILSON. 25th February 1863.

522. EDWARD BROWN WILSON, of No. 5, Parliament Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement or improvements in the manufacture of an alloy or alloys of titanium and iron."
Provisional protection only.

GREEN. 25th February 1863.

523. JOHN BARCHAM GREEN, of Hayle Mill, Maidstone, in the County of Kent, Paper Manufacturer, for an invention for—"Improvements in the manufacture of paper."
Provisional protection only.

LAWRENCE. NIBLETT. 25th February 1863.

524. BENJAMIN LAWRENCE, of Newport, in the County of Monmouth, Architect, and WILLIAM NIBLETT, of the same place, Engineer, for an invention for—"Improvements in apparatus for regulating the flow of gas for purposes of illumination."
Letters Patent sealed.

GAILEY. 25th February 1863.

525. JOSEPH GAILEY, of Princes Street, Chelsea, in the County of Middlesex, Joiner, for an invention for—"Improvements in apparatus for the purpose of supplying air for mixture with gases and other aëriform fluids."
Provisional protection only.

EDWARDS. 25th February 1863.

526. JOHN EDWARDS, of 29, Basinghall Street, in the City of London, for an invention for—"Improvements in the manufacture of buttons."
Provisional protection NOT *granted.*

HENSON. 25th February 1863.

527. HENRY HENSON HENSON, of No. 13, Parliament Street, Westminster, in the County of Middlesex, Engineer, for an invention for—"Improvements in mats."
Letters Patent sealed.

LEE. 25th February 1863.

528. THOMAS VINCENT LEE, of 6, Bank Chambers, Lothbury, in the City of London, Civil Engineer, for an invention for—"Improvements in machinery for digging, compressing and moulding peat or turf, and for retorts and kilns for drying peat or turf, and making peat or turf charcoal through the agency of hydro-caloric or superheated steam, and for collecting the products of distillation whilst charring the peat or turf."
Letters Patent sealed.

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NEWTON. 25th February 1863.	**529.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in producing stereotype plates for printing purposes."—*A communication to him from abroad by Richard March Hoe, of New York, in the United States of America.* *Letters Patent sealed.*
HUDSON. CATLOW. 25th February 1863.	**530.** WILLIAM HUDSON, of Burnley, in the County of Lancaster, Gentleman, and CHRISTOPHER CATLOW, of the same place, Overlooker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*
THOMPSON. 25th February 1863.	**531.** NATHAN THOMPSON, of Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in machinery for sawing wood." *Letters Patent sealed.*
INGLIS. 25th February 1863.	**532.** JAMES INGLIS, of Edinburgh, in the County of Mid-Lothian, North Britain, Book Binder, for an invention for—"Improvements in machinery or apparatus for folding paper and other fabrics or materials." *Letters Patent sealed.*
MACIVOR. 25th February 1863.	**533.** ALEXANDER MACIVOR, of the Edinburgh University, North Britain, Chemist, for an invention for—"Improvements in veneering or overlaying woods according to two methods, 1st, by means of steam exhaustion or steam pressure or air exhaustion or air pressure, 2dly, by the employment of electro-magnetism." *Letters Patent sealed.*
TOMKINS. 25th February 1863.	**534.** GEORGE TOMKINS, of Morriston, in the County of Glamorgan, Tin Plate Worker, for an invention for—"Improvements in the manufacture of tin and terne plates, and in the apparatus employed therein." *Letters Patent sealed.*
EDMONDS. 26th February 1863.	**535.** HENRY EDMONDS, M.D., Surgeon, Royal Navy, residing at Peel Lodge, Stoke Road, Gosport, County of Southampton, for an invention for—"Improvements in the ventilation of ships and vessels, and apparatus connected therewith." *Letters Patent sealed.*
BROWN. 26th February 1863.	**536.** HENRY WALTER BROWN, of Walham Green, in the County of Middlesex, Gentleman, for an invention for—"Improvements in window frames and in glazing windows." *Provisional protection only.*
RITCHIE. 26th February 1863.	**537.** CHARLES RITCHIE, Engineer, of South Street, Finsbury Market, London, for an invention for—"An improved machine for making spiral lighters or spills from wood or other substance, and which machine will make and colour them when desired at one process or operation." *Letters Patent sealed.*
LILLEY. 26th February 1863.	**538.** GEORGE HENRY LILLEY, of Dalston, in the County of Middlesex, Draughtsman, for an invention for—"Improvements in apparatus for connecting and securing together planks of wood applicable to the building and caulking of ships and other vessels." *Provisional protection only.*
WILSON. SMITH. 26th February 1863.	**539.** WILLIAM ASHLEY WILSON, of Liverpool, in the County of Lancaster, Engineer, and JAMES SMITH, also of Liverpool, in the County of Lancaster, aforesaid, Baker, for an invention for—"Improvements in furnace fire-grates." *Letters Patent sealed.*
CAPELLO. 26th February 1863.	**540.** ANGE CAPELLO, Currier, of No. 4, Rue du Repentir, Marseilles, in the Empire of France, for an invention for—"An improved method of and apparatus for glazing morocco leather." *Provisional protection only.*
PRICE. 26th February 1863.	**541.** ASTLEY PASTON PRICE, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the production and manufacture of blue colors."—*A communication to him from abroad by Augustus Eisenlohr, of Heidelberg, in the Grand Duchy of Baden, Doctor of Philosophy.* *Letters Patent sealed.*
YATES. 26th February 1863.	**542.** JAMES YATES, of Rotherham, in the County of York, Iron Master, for an invention for—"Improvements in the manufacture of armour plates or blocks for defensive purposes." *Letters Patent sealed.*
SPENCE. 26th February 1863.	**543.** PETER SPENCE, of Newton Heath, Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of potash alum and other salts of potash." *Provisional protection only.*

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CLARK.
26th February 1863.

544. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of buttons and in apparatus for the same."—*A communication to him from abroad by Achille Auguste Feldtrappe and René Dufoy, both of 29, Boulevart St. Martin, Paris.*
Provisional protection only.

PUDDEFOOT.
26th February 1863.

545. MICHAEL PUDDEFOOT, of Blisset Street, Greenwich, in the County of Kent, Hat Manufacturer, for an invention for—"Improvements in implements for tilling and cultivating land."
Provisional protection only.

HUMBY.
26th February 1863.

546. JAMES HUMBY, of No. 14, Gresham House, Old Broad Street, in the City of London, for an invention for—"Improvements in furnaces and apparatus for manufacturing oxide of zinc or zinc white."—*A communication to him from abroad by Heinrich Felsch, resident at Witten, Westphalia, in the Kingdom of Prussia.*
Provisional protection only.

NODDER.
26th February 1863.

547. RICHARD JOSEPH NODDER, of Liverpool, in the County of Lancaster, Hat Manufacturer, for an invention for—"Improvements applicable to hats, caps, helmets, military head dresses and other like coverings for the head."
Letters Patent sealed.

TWILLEY.
26th February 1863.

548. FREDERICK HENRY TWILLEY, of Dean Street, Soho, in the County of Middlesex, for an invention for—"Improvements in book slides or holders."
Provisional protection only.

ALBINSON.
COCKER.
27th February 1863.

549. JOHN HOUGHTON ALBINSON, and HENRY HOOTON COCKER, both of Bolton, in the County of Lancaster, Silk Spinners, Doublers and Throwsters, for an invention for—"Improvements in spinning, doubling, throwing and reeling silk, and in the machinery employed therein."
Letters Patent sealed.

STAUFEN.
27th February 1863.

550. WERNER STAUFEN, of George Street, Portman Square, in the County of Middlesex, for an invention for—"A new or improved fibrous substitute for human and other hair, to be used for all the purposes for which human and other hair is now used, and also for the manufacture of textile fabrics.
Letters Patent sealed.

FEHR.
27th February 1863.

551. HENRY FEHR, Merchant and Distiller, of 63, Fenchurch Street, London, for an invention for—"Improvements in the treatment of mineral oils."
Provisional protection only.

HUGHES.
27th February 1863.

552. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in machinery or apparatus for doubling or twisting yarn, thread, braid, rope or similar articles."—*A communication to him from abroad by Jean Marie Daillon, of Lyons, in the Empire of France.*
Letters Patent sealed.

CARVER.
27th February 1863.

553. JAMES CARVER, of the firm of Messieurs Carver and Mosley, of "The Butcher Street Works," in the Town and County of the Town of Nottingham, Bobbin and Carriage Manufacturer, for an invention for—"Improvements in the arrangement or fixing of combs in machines employed in the manufacture of bobbin net or twist lace."
Letters Patent sealed.

COFFEY.
27th February 1863.

554. JOHN AMBROSE COFFEY, of 4, Providence Row, Finsbury, in the County of Middlesex, Engineer, for an invention for—"An improved method of and apparatus for controlling and facilitating locomotion whether on land or on water."
Letters Patent sealed.

FRY.
27th February 1863.

555. JAMES FRY, of Chesham, in the County of Buckingham, Engineer, for an invention for—"Improvements in mashing-machinery used in making fermented liquors."
Provisional protection only.

BROOMAN.
27th February 1863.

556. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A new method of and apparatus for boring into water and gas supply pipes, and fixing branch pipes thereon."—*A communication to him from abroad by Edme Ernest Mathelin and Pierre Lucien Mathelin, of Tourcoing, France.*
Provisional protection only.

DUDGEON.
MEAKIN.
ALLEN.
27th February 1863.

557. ARTHUR DUDGEON, and GEORGE FREDERICK LEE MEAKIN, both of 4, Martin's Lane, Cannon Street, in the County of Middlesex, Surveyors, and EDWARD ELLIS ALLEN, of 5, Parliament Street, Westminster, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of underground railways or subways, and in carriages to be used or worked therein."
Letters Patent sealed.

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GRAY. 27th February 1863.

558. WILLIAM GRAY, of Sheffield, in the County of York, Machine Knife Manufacturer, for an invention for—"Improvements in the manufacture of beaters for thrashing-machines." *Letters Patent sealed.*

CLARK. 27th February 1863.

559. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex Engineer and Patent Agent, for an invention for—"Improvements in pumping and forcing water and in apparatus for the same."—*A communication to him from abroad by Barthelemy Louvié, of 29, Boulevart St. Martin, Paris, Civil Engineer.* *Letters Patent sealed.*

DELAHAYE. 27th February 1863.

560. VICTOR DÉSIRÉ DELAHAYE, Civil Engineer, 7, Cauchoise Street, at Rouen (France), for an invention for—"Improvements in apparatus for cleaving and excavating pit coal and rock or earth." *Letters Patent sealed.*

JOHNSON. 27th February 1863.

561. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus employed in the preparation or treatment of hemp and other textile materials."—*A communication to him from abroad by François Jules Vignaud, of Paris, in the Empire of France, Manufacturer.* *Letters Patent sealed.*

WEST. 28th February 1863.

562. BENJAMIN WEST, of 2, St. James Walk, Clerkenwell, in the County of Middlesex, Bookbinder, for an invention for—"An improvement or improvements in metallic pens." *Provisional protection only.*

ROYLE. 28th February 1863.

563. GEORGE ROYLE, of No. 32, King's Street, Cheapside, in the County of Middlesex, for an invention for—"A new or improved apparatus for creasing or marking rouches." *Provisional protection only.*

HADFIELD. 28th February 1863.

564. WILLIAM HADFIELD, of Bolton, in the County of Lancaster, Boiler Maker, for an invention for—"Improvements in steam-boilers and in the arrangement of flues in connection therewith." *Letters Patent sealed.*

FRIEND. 28th February 1863.

565. JOHN WALTER FRIEND, of Freemantle, Southampton, for an invention for—"An improved gas meter." *Provisional protection only.*

FARRA. 28th February 1863.

566. THOMAS FARRA, of Manchester, in the County of Lancaster, Salesman, for an invention for—"A new application and combination of materials to be employed in the manufacture of 'skirtings.'" *Provisional protection* NOT *granted.*

MAXFIELD. 28th February 1863.

567. JOSEPH MAXFIELD, of Warrington, in the County of Lancaster, Brewer, for an invention for—"Certain improvements in brewing and in apparatus employed therein." *Letters Patent sealed.*

WILLIAMSON. 28th February 1863.

568. STEPHEN WILLIAMSON, of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in the construction of furnaces." *Letters Patent sealed.*

COLLINGE. 28th February 1863.

569. DANIEL COLLINGE, of Oldham, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Improvements in machinery or apparatus for cleaning, steaming and preparing cotton or other fibrous materials to be spun." *Letters Patent sealed.*

PAINE. 28th February 1863.

570. EDWARD PAINE, of Liverpool, in the County of Lancaster, Master Mariner, for an invention for—"Improved apparatus for facilitating the cleaning of vessels' bottoms while afloat." *Letters Patent sealed.*

SYMONDS. 28th February 1863.

571. THOMAS EDWARD SYMONDS, of Adam Street, Adelphi, Commander in Her Majesty's Navy, for an invention for—"Improvements in the construction of screw-propelled ships and in the arrangement and mode of disconnecting, withdrawing and lifting screw propellers." *Letters Patent sealed.*

PENN. 28th February 1863.

572. JOHN PENN, of Greenwich, in the County of Kent, for an invention for—"Improvements in escape or relief valves to the cylinders of marine and other steam-engines." *Letters Patent sealed.*

COURTENAY. 28th February 1863.

573. JOSCELINE COURTENAY, of No. 9, Down Street, Piccadilly, in the County of Middlesex, for an invention for—"Improvements in obtaining motive-power."—*A communication to him from abroad by Reginald Courtenay, Bishop of Kingston, Jamaica, of Craigton, Kingston, Jamaica, aforesaid.* *Provisional protection only.*

HAYES. 28th February 1863.

574. EDWARD HAYES, of Stoney Stratford, in the County of Bucks, for an invention for—"Improvements in supplying water to surface condensers of marine engines." *Letters Patent sealed.*

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BATEMAN. 28th February 1863.

575. SAMUEL BATEMAN, of Low Moor, near Bradford, in the County of York, for an invention for—"Improvements in the manufacture of wire rope and cordage, and in the machinery employed therein." *Letters Patent sealed.*

HASELTINE. 28th February 1863.

576. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for —"Improvements in sewing-machines."—*A communication to him from abroad by Lebbeus Wisner Lathrop, of Philadelphia, Pennsylvania, United States.* *Letters Patent sealed; no specification filed.*

MURRELL. 2nd March 1863.

577. OWEN MURRELL, of Bethnal Green Road, in the County of Middlesex, for an invention for—"Improved arrangements for generating steam in steam-boilers and other vessels, and for heating the liquid contents thereof." *Letters Patent sealed.*

TOLHAUSEN. 2nd March 1863.

578. FREDERICK TOLHAUSEN, of 17, Faubourg Montmartre, Paris, Patent Agent, for an invention for—"Improvements in cloth blankets and other fabrics to be used in machinery for printing fabrics, paper hangings and letter press."—*A communication from Achille Clément, Merchant, a person resident in the Rue d'Enghien, Paris.* *Provisional protection only.*

BURTON. 2nd March 1863.

579. JOHN WATSON BURTON, of Leeds, in the County of York, Gentleman, for an invention for—"An improved mode of refining and purifying oils." *Letters Patent sealed.*

PAGNY. 2nd March 1863.

580. AIMÉ FRANÇOIS PAGNY, of No. 15, Passage des Petites Ecuries, in the City of Paris, in the Empire of France, Gentleman, for an invention for—"A new agricultural implement for cultivating tubercles, roots and all oil plants." *Letters Patent sealed.*

HAWKSLEY. BISSELL. 2nd March 1863.

581. GEORGE HAWKSLEY, of Sheffield, in the County of York, Manufacturer, and THOMAS BISSELL, of 75, Tooley Street, London, Gun Maker, for an invention for—"Improvements in powder charges." *Letters Patent sealed.*

HABEL. SUCKOW. 2nd March 1863.

582. EDWARD HABEL, of Manchester, in the County of Lancaster, Machinist, and EDMUND SUCKOW, of the same place, Machinist, for an invention for—"Certain improvements in machinery or apparatus for preparing, spinning and doubling cotton and other fibrous substances." *Letters Patent sealed.*

TAYLOR. 2nd March 1863.

583. THOMAS TAYLOR, of No. 7, Wellington Row, Bethnal Green, in the County of Middlesex, for an invention for—"The manufacture of a new or improved fabric and its application to the formation of ornaments for fire stoves and other decorative purposes." *Provisional protection only.*

GARTON. 2nd March 1863.

584. CHARLES GARTON, of the City and County of Bristol, Brewer, for an invention for—"An improved method of applying heat in the manufacture and refining of sugar, and in malting, hop drying, brewing, distilling and vinegar making." *Letters Patent sealed.*

WELLS. 2nd March 1863.

585. JOHN SCOTT WELLS, of Mount Street, Nottingham, for an invention for—"Improvements in the manufacture of stockings and other looped fabrics made in knitting-machines." *Letters Patent sealed.*

CLARK. 2nd March 1863.

586. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in preparing and obtaining photographic impressions, and in the application of such impressions."—*A communication to him from abroad by Alphonse Louis Poitevin, of 29, Boulevart St. Martin, Paris, Civil Engineer.* *Provisional protection only.*

SYMONDS. 3rd March 1863.

587. THOMAS EDWARD SYMONDS, of Adam Street, Adelphi, Commander in Her Majesty's Navy, for an invention for—"Improvements in the apparatus for steering ships." *Letters Patent sealed.*

EMMOTT. 3rd March 1863.

588. THOMAS EMMOTT, of Vale Mills, Oldham, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in mules for spinning and doubling." *Provisional protection only.*

SAUNDERS. 3rd March 1863.

589. ROBERT SAUNDERS, of Croydon, in the County of Surrey, for an invention for—"Improvements in metal sheathing for ships and vessels, and in the securing of such sheathing thereto." *Provisional protection only.*

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LYSTER. 3rd March 1863.

590. GEORGE FOSBERY LYSTER, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in mooring buoys."
Letters Patent sealed.

JONES. ABRAHALL. 3rd March 1863.

591. RICHARD HENRY JONES, of Birmingham, in the County of Warwick, Jeweller, and JOHN ABRAHALL, of Birmingham, aforesaid, Jeweller, for an invention for—"Improvements in bracelets and brooches." *Provisional protection only.*

DAVIES. 3rd March 1863.

592. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in polishing or giving a lustre to soap and in the apparatus employed in such process."—*A communication to him from abroad by Adolphe Dupuis, of Paris, in the Empire of France, Chemist.*
Provisional protection only.

HENDERSON. 3rd March 1863.

593. JOHN HENDERSON, of Bradford, in the County of York, Carpet Manufacturer, for an invention for—"Improvements in machinery or apparatus for the manufacture of carpets and other piled fabrics." *Letters Patent sealed.*

PRICE. DAWES. 3rd March 1863.

594. GEORGE PRICE, of Cleveland Safe and Lock Works, Wolverhampton, in the County of Stafford, Iron Safe and Lock Manufacturer, and WILLIAM DAWES, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in burglar proof safes and strong room doors and frames."
Letters Patent sealed.

SIBERT. 3rd March 1863.

595. JOHN SIBERT, of Nottingham, Machinist, for an invention for—"Improvements in apparatus for winding and measuring lace." *Provisional protection only.*

LAMB. 3rd March 1863.

596. GEORGE LAMB, late of New York, now of No. 9, America Square, Minories, in the City of London, for an invention for—"Improvements in apparatus for recording the revolutions of the propelling shaft of a steam ship or vessel."
Provisional protection only.

ERICH. 3rd March 1863.

597. THEODOR ERICH, of 77, Newgate Street, in the City of London, for an invention for—"Improvements in machinery for pressing peat."—*A communication to him from abroad by Christian Augustus Erich, a person resident at Munich, in the Kingdom of Bavaria.* *Provisional protection only.*

PARSONS. 3rd March 1863.

598. DAVID BALL PARSONS, formerly of Hoosick Falls, New York, in the United States of America, and now of No. 77, Upper Thames Street, in the City of London, for an invention for—"Improvements in reaping and mowing machines."—*The result partly of communications from abroad made to him by Walter Abbott Wood, a person resident at Hoosick Falls, New York, in the United States of America, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

COHEN. 3rd March 1863.

599. BARNET SOLOMON COHEN, of No. 9, Magdalen Row, Great Prescott Street, Goodman's Fields, in the County of Middlesex, Pencil Manufacturer, for an invention for—"Improvements in apparatus for protecting the points of pencils."
Letters Patent sealed.

PARSONS. 3rd March 1863.

600. WILLIAM PARSONS, of Earl Street, Edgeware Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in dining-tables."
Provisional protection only.

POLLARD. 3rd March 1863.

601. JAMES POLLARD, of Leeds, in the County of York, Commission Agent, for an invention for—"Improvements in warp dressing and in apparatus connected therewith."—*A communication to him from abroad by Peter Garvie, of Zyrardow, near Warsaw, in the Kingdom of Poland.* *Letters Patent sealed.*

PALMER. MCINTYRE. 4th March 1863.

602. CHARLES MARK PALMER, and JOHN MCINTYRE, both of Jarrow, in the County of Durham, Ship Builders, for an invention for—"An improved mode of applying and fastening metal sheathing to the bottoms of iron ships or vessels, and to iron for other uses." *Letters Patent sealed.*

GITS. 4th March 1863.

603. JEAN FRANÇOIS GITS, of the firm of Gits & Co., of Antwerp, in the Kingdom of Belgium, Manufacturer, for an invention for—"An improved furnace for the revivification of animal charcoal." *Letters Patent sealed.*

PAUL. 4th March 1863.

604. AMEDÉE PAUL, jeune, of Bordeaux, in the Empire of France, Gentleman, for an invention for—"Improvements in spring bed bottom."
Provisional protection NOT *granted.*

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DE KEYSER. 4th March 1863.

605. JOSEPH DE KEYSER, of Molenbeck St. Jean, in the Kingdom of Belgium, for an invention for—"Improvements in treating petroleum oil and in the combination thereof with other oils for lubricating and other like purposes."
Provisional protection only.

MORRELL. WILLIAMSON. 4th March 1863.

606. THOMAS HENRY MORRELL, of Leyland, in the County of Lancaster, Gentleman, and JOSEPH WILLIAMSON, of Willcross, Gisburn, in the County of York, Gentleman, for an invention for—"A new or improved method of purifying the noxious vapours or gases given off from night soil or other similar substances during the heating, drying or evaporating of such substances."
Letters Patent sealed.

WÜNSCH. 4th March 1863.

607. EDWARD ALFRED WÜNSCH, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in treating sea weed and in apparatus therefor."
Letters Patent sealed.

ADIE. 4th March 1863.

608. PATRICK ADIE, of the Strand, in the County of Middlesex, Mathematical Instrument Maker, for an invention for—"Improvements in means and apparatus for measuring angular and actual distances."
Complete specification; Letters Patent sealed by order.

BINNEY. 4th March 1863.

609. EDWARD WILLIAM BINNEY, of No. 40, Cross Street, Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in pressure and pump lamps."—*A communication to him by Isaac Van Bunchoton, of the City of New York, in the United States of America.* *Provisional protection* NOT *granted.*

BINNEY. 4th March 1863.

610. EDWARD WILLIAM BINNEY, of No. 40, Cross Street, Manchester, in the County of Lancaster, Gentleman, for an invention for—"An improved lamp burner."—*A communication to him from abroad by Samuel Adlam, junior, of Portland, Maine, in the United States of America.* *Provisional protection only.*

CLARK. 4th March 1863.

611. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of sulphuric acid and in apparatus for the same."—*A communication to him from abroad by Louis Désiré Verstraet, Chemist, and Charles Schmid, Merchant, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HAMILTON. 4th March 1863.

612. WILLIAM HAMILTON, of 13, Paternoster Row, in the City of London, Advertising Agent, for an invention for—"Improvements in means or apparatus for registering suitable for advertisers' purposes." *Provisional protection only.*

CRAIG. 4th March 1863.

613. JAMES CRAIG, of Weston Park, Shipston-on-Stour, in the County of Worcester, for an invention for—"Improvements in apparatus for detecting and detaining thieves and indicating the presence of fire." *Provisional protection only.*

TIZARD. 4th March 1863.

614. WILLIAM LITTELL TIZARD, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in manufacturing curvated armour plates and other iron work, and in machinery or apparatus employed therein."
Provisional protection only.

WHITTLE. 5th March 1863.

615. WILLIAM WHITTLE, of Smethwick, in the County of Stafford, Mechanical Engineer, for an invention for—"Improvements in machinery for the manufacture of nails." *Letters Patent sealed.*

THORNTON. THORNTON. THORNTON. 5th March 1863.

616. THOMAS THORNTON, EDWIN THORNTON, and ROBERT THORNTON, of Elland, in the County of York, Manufacturers, for an invention for—"Improvements in machinery or apparatus for preparing wool or other fibrous substances for spinning." *Letters Patent sealed.*

CLINTON. 5th March 1863.

617. JOHN CLINTON, of 35, Percy Street, Tottenham Court Road, in the County of Middlesex, Professor of Music, for an invention for—"Improvements in the construction of flutes." *Letters Patent sealed.*

ALLEN. JOHNSON. 5th March 1863.

618. WILLIAM ALLEN, of Cheadle, in the County of Chester, Cotton Spinner, and WILLIAM JOHNSON, of Newton Moor, in the same County, Manager, for an invention for—"Certain improvements in machinery or apparatus for grinding 'cards' employed in carding-engines." *Letters Patent sealed.*

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DWYER. 5th March 1863.	**619.** ROBERT DOYNE DWYER, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in springs to be employed in the manufacture of beds, seats, or for similar purposes where an elastic surface is required." *Provisional protection only.*
PLENTY. PAIN. 5th March 1863.	**620.** EDWARD PELLEW PLENTY, and WILLIAM PAIN, of Newbury, in the County of Berkshire, Agricultural Engineers, for an invention for—"An improved method of supporting screens and straw shakers specially applicable to threshing machines." *Provisional protection only.*
WELLS. 5th March 1863.	**621.** WILLIAM WELLS, of Ryder's Court, Leicester Square, in the County of Middlesex, for an invention for—"Improvements in horse-shoes and in the method of fastening the same." *Provisional protection only.*
JACKSON. WATKINS. 5th March 1863.	**622.** WILLIAM JACKSON, and RICHARD WATKINS, both of the Canal Iron Works, Millwall, Poplar, E., Engineers, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*
FOSTER. BUNNEY. ANDERSON. 5th March 1863.	**623.** SAMUEL HALL FOSTER, and THOMAS BUNNEY, of Leicester, Manufacturers, and JAMES ANDERSON, of the same place, Overlooker, for an invention for—"Improvements in means or apparatus for the manufacture of looped fabrics." *Letters Patent sealed.*
MILLER. 5th March 1863.	**624.** JOHN MILLER, of Upwey, near Dorchester, in the County of Dorset, Gentleman, for an invention for—"Improvements in horticultural buildings and other glazed structures, part of which improvements is also applicable to ventilating other buildings." *Letters Patent sealed.*
WILSON. 5th March 1863.	**625.** EDWARD BROWN WILSON, of No. 5, Parliament Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement or improvements in the manufacture of steel and in the apparatus employed therein." *Provisional protection only.*
OSBORNE. 5th March 1863.	**626.** THOMAS WESTWOOD OSBORNE, Lamp Maker, of Aston New Town, in the County of Warwick, for an invention for—"Certain improvements in lamps." *Provisional protection only.*
HOWIE. 5th March 1863.	**627.** JOHN HOWIE, of Hurlford, in the County of Ayr, North Britain, Coal Master, for an invention for—"Improvements in the construction of the crossings of railways." *Letters Patent sealed.*
CLARK. 5th March 1863.	**628.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by Alexandre Guerriero, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*
ELSEY. 5th March 1863.	**629.** JOSEPH ELSEY, of the Town and County of the Town of Nottingham, Lace Manufacturer, for an invention for—"Improved apparatus for the winding of lace on to the work roller in warp lace, bobbin net or twist lace machines." *Letters Patent sealed.*
CLAY. 5th March 1863.	**630.** CHARLES CLAY, of Walton Grange, Wakefield, in the County of York, for an invention for—"Improvements in chain harrows." *Provisional protection only.*
MORRIS. NEWTON. 5th March 1863.	**631.** JOHN MORRIS, and THOMAS NEWTON, both of 200, Upper Thames Street, and 8, Huggin Lane, in the City of London, Zinc Workers, for an invention for—"An improvement or improvements in refrigerators and other like articles." *Letters Patent sealed.*
BUCKLAND. 5th March 1863.	**632.** WILLIAM HENRY BUCKLAND, of Barge Yard, in the City of London, Gentleman, for an invention for—"Improvements in the mode of and in the apparatus for producing gas for illuminating and heating purposes, parts of which improvements are also applicable for increasing the illuminating and heating power of ordinary lighting gas." *Letters Patent sealed.*
JOURDIN. 6th March 1863.	**633.** MICHEL JOURDIN, of the City of Manchester, Chemist, for an invention for—"Improvements in machinery for engraving by means of electricity." *Provisional protection only.*
CUTHELL. 6th March 1863.	**634.** ALEXANDER CUTHELL, of Skerton, in the County of Lancaster, for an invention for—"Improvements in self-acting dampers for steam-engine furnaces." *Letters Patent sealed.*

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MAKINSON. 6th March 1863.

635. ALEXANDER WOODLANDS MAKINSON, of Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in locomotive and stationary engines." *Letters Patent sealed.*

WILSON. 6th March 1863.

636. ALFRED WILSON, of 50, Lower Woodbridge Street, Clerkenwell, Chair and Cabinet Maker, for an invention for—"The better and more commodious manufacture of all kinds of easy, lounging and invalid chairs, seats or settles." *Letters Patent sealed.*

GEDGE. 6th March 1863.

637. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Jules Mouvet, of Orleans, France.* *Provisional protection only.*

BOUSFIELD. 6th March 1863.

638. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of illuminating gas, and in apparatus employed therein."—*A communication to him from abroad by Dr. William Elmer, a person resident at New York, in the United States of America.* *Letters Patent sealed.*

RANSOM. 6th March 1863.

639. DENNIS WILLIAM RANSOM, of 24, Pembroke Place, Liverpool, in the County of Lancaster, for an invention for—"Improvements in fixing artificial teeth." *Letters Patent sealed.*

HANCOCK. 6th March 1863.

640. THOMAS HANCOCK, of Birchwood, near Alfreton, in the County of Derby, Colliery Manager, for an invention for—"An improved receptacle for gold, silver or other coins." *Letters Patent sealed.*

SPICER. 6th March 1863.

641. HENRY REVELL SPICER, of No. 3, Clement's Lane, Lombard Street, in the City of London, Ship Broker, for an invention for—"Improvements in protecting and preserving the bottoms and sides of ships and other submerged surfaces from oxidation or fouling by incrustation, the attachment of barnacles, the action of animalculæ, or from any other like causes of injury." *Provisional protection only.*

WEBB. 6th March 1863.

642. THOMAS GEORGE WEBB, of Manchester, in the County of Lancaster, Glass Manufacturer, for an invention for—"Improvements in the manufacture of articles of pressed glass." *Letters Patent sealed.*

NEWTON. 6th March 1863.

643. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of elastic carriage wheel."—*A communication to him from abroad by Seth Woodbury, of Lynn, State of Massachusetts, United States of America.* *Letters Patent sealed.*

NEWTON. 6th March 1863.

644. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of metal casks and in the machinery employed in the manufacture thereof."—*A communication to him from abroad by Samuel Jefferson Seely, of Brooklyn, and Edmund Brown Bulkley, of New York, United States of America.* *Letters Patent sealed.*

WHITTLES. 9th March 1863.

645. HENRY WHITTLES, of Milnrow, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for collecting the condensed steam or waste water from places where steam is used, and returning the same to the boiler." *Provisional protection only.*

MUSHET. 9th March 1863.

646. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement in the manufacture or treatment of pig or cast iron." *Letters Patent sealed.*

COWLEY. 9th March 1863.

647. JAMES COWLEY, of the City of Oxford, Engineer, for an invention for—"Improvements in machinery or apparatus for manufacturing bricks, tiles, pipes and mouldings." *Letters Patent sealed.*

BONNEVILLE. 9th March 1863.

648. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"A new aromatic vinegar for removing stains from cloth and other materials."—*A communication from Philippe Prudon and Edouard Cari Montrand, Chemists, residing at Issy, near Paris, in the Empire of France.* *Letters Patent sealed.*

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ISHERWOOD. 9th March 1863.

649. JAMES ISHERWOOD, of Sharples, near Bolton, in the County of Lancaster, Yarn Bleacher, for an invention for—"Improvements in working presses for making up yarn in bundles." *Letters Patent sealed.*

HAWORTH. 9th March 1863.

650. JOHN HAWORTH, of the City of Manchester, Gentleman, for an invention for—"Improvements in breaks for omnibuses and other carriages." *Provisional protection only.*

LEA. 9th March 1863.

651. CHARLES HENRY LEA, of Shallowford, near Stone, in the County of Stafford, Miller, for an invention for—"Improved apparatus for opening and closing the gates of railway crossings, which apparatus also acts simultaneously upon the signals." *Letters Patent sealed.*

INGLIS. 9th March 1863.

652. WILLIAM INGLIS, of Edinburgh, North Britain, and of Montreal, Canada, Engineer, for an invention for—"Improvements in steam-boilers and engines." *Letters Patent sealed.*

HUGON. 9th March 1863.

653. PIERRE HUGON, of Paris, 56, Rue de l'Ouest, in the French Empire, Civil Engineer, for an invention for—"Improved machinery for obtaining and applying motive-power." *Letters Patent sealed.*

KELLER. 9th March 1863.

654. SIR ALBERT KELLER, Native of Zurich, Switzerland, and established in Milan and Turin, for an invention for—"An improved apparatus for reeling silk direct from cocoons, on bobbins." *Letters Patent sealed.*

CLAPP. COATS. 9th March 1863.

655. WILLIAM JOHN CLAPP, of Nantyglo Iron Works, in the County of Monmouth, and NATHANIEL COATS, of Serhowy Iron Works, in the County of Monmouth, for an invention for—"Improved armour plates for vessels, turrets, targets, forts and other structures in which armour plates are or may be used." *Letters Patent sealed and specification filed by order.*

GORST. 9th March 1863.

656. JOHN RICHARDSON GORST, of Liverpool, in the County of Lancaster, Carriage Builder, for an invention for—"Improvements in carriages." *Letters Patent sealed.*

NEWTON. 9th March 1863.

657. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction or laying of wooden floors."—*A communication to him from abroad by Edouard Hamelle, of St. Quentin, in the Empire of France.* *Letters Patent sealed.*

JOHNSON. 9th March 1863.

658. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment of certain fibrous vegetable substances with a view to the production of textile materials therefrom."—*A communication to him from abroad by Vittorio Secondo Ferrero, of Asti, in the Kingdom of Italy.* *Complete specification*; *Letters Patent sealed.*

FLETCHER. 11th March 1863.

659. HENRY FLETCHER, of Manchester, Engraver and Mechanician, for an invention for—"Improvements in cleaning and preparing cotton for spinning." *Provisional protection only.*

MONTEITH. MONTEITH. 11th March 1863.

660. ROBERT THOMSON MONTEITH, of Saint Malo, in the Empire of France, British Vice Consul, and ROBERT MONTEITH, of 64, Crystal Terrace, Cecil Street, Greenheys, Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in making dyes from aniline and its analogues."—*A communication to them by Georges Auguste Jules Delveaux, residing at No. 7, Rue Corneille, Paris, in the Empire of France.* *Letters Patent sealed.*

COOKE. 11th March 1863.

661. FREDERICK COOKE, of Denton, in the County of Lancaster, Hat Manufacturer, for an invention for—"Certain improvements in the manufacture of hats or coverings for the head." *Provisional protection only.*

BROOMAN. 11th March 1863.

662. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in voltaic belts and bandages."—*A communication to him from abroad by Florent Babin, of Paris, France.* *Provisional protection only.*

CASSELL. 11th March 1863.

663. JOHN CASSELL, of La Belle Sauvage Yard, in the City of London, Publisher, for an invention for—"Improvements in moderator lamps to adapt them to the burning of petroleum and other mineral oils and hydrocarbons."—*A communication to him from abroad by Louis Martin, of Paris, France.* *Letters Patent sealed.*

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FULTON. CLYDE. 11th March 1863.

664. GEORGE ALEXANDER FULTON, and JACKSON CLYDE, both of Stepney, in the County of Middlesex, Gas Engineers, for an invention for—"Improvements in dry gas-meters." *Provisional protection only.*

MULLEY. 11th March 1863.

665. WILLIAM ROBINSON MULLEY, of Plymouth, in the County of Devon, Surveyor to Lloyd's Register, for an invention for—"Improvements in sheathing iron ships, caissons and other like structures." *Letters Patent sealed.*

WILSON. 11th March 1863.

666. HENRY WILSON, Engineer, in the employment of Powis and James, of Watling Street, in the City of London, Engineers, for an invention for—"Improvements in machinery for shaping wood." *Letters Patent sealed.*

WOOD. 11th March 1863.

667. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture and ornamentation of pomfret or liquorice cakes, rolls, sticks and pipes, and other similar articles of confectionery." *Letters Patent sealed.*

BARCLAY. 11th March 1863.

668. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, Engineer, for an invention for—"Improvements in locomotive boring and winding engines." *Letters Patent sealed.*

BARCLAY. 11th March 1863

669. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, Engineer, for an invention for—"Improvements in traction engines and in apparatus for indicating the pressure of steam." *Letters Patent sealed.*

WERGE. 11th March 1863.

670. JOHN WERGE, of 379, Oxford Street, in the County of Middlesex, Dealer in Photographic and Scientific Instruments, for an invention for—"Improvements in apparatus for indicating any regulated maximum or minimum degree of temperature."—*A communication to him from abroad by Alexander Ross, of Montreal, Canada, Mathematical and Scientific Instrument Maker.* *Letters Patent sealed.*

TOMLINSON. 11th March 1863.

671. JAMES TOMLINSON, of the Roach Iron Works, Rochdale, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery for opening twisted yarns and woven fabrics." *Letters Patent sealed.*

RENSHAW. 11th March 1863.

672. JOSEPH RENSHAW, of the City of Manchester, Machinist, for an invention for—"Improvements in machinery for dressing, raising and brushing silk and cotton velvets, velveteens, cords, plushes and other piled fabrics." *Letters Patent sealed.*

ROSSETTER. 11th March 1863.

673. WILLIAM ROSSETTER, of Accrington, in the County of Lancaster, Mechanic, for an invention for—"Improvements in back beam warping-machines." *Letters Patent sealed.*

BUSER-KRAUSHAAR. 12th March 1863.

674. FREDERICK BUSER-KRAUSHAAR, of Bale, in the Republic of Switzerland, and of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in apparatus for winding, cleaning, measuring, sorting, doubling, throwing and reeling silk, parts of which improvements are also applicable to like machinery for spinning, doubling and twisting cotton, wool and other fibrous materials." *Letters Patent sealed.*

TAYLOR. TAYLOR. 12th March 1863.

675. HENRY DYSON TAYLOR, and JOHN WILLIAM TAYLOR, both of Huddersfield, in the County of York, for an invention for—"Improvements in finishing woollen, worsted and other fabrics, and in machinery or apparatus to be used therein." *Letters Patent sealed.*

DESENS. 12th March 1863.

676. LOUIS DESENS, of Paris, Boulevard Bonne Nouvelle, No. 35 (French Empire), Gentleman, for an invention for—"An improved bath or bathing machine adapted for deep water." *Provisional protection only.*

CLARK. 12th March 1863.

677. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Charles Auguste Cancalon, of 29, Boulevart St. Martin, Paris, Registrar.* *Letters Patent sealed.*

LOMAS. 12th March 1863.

678. EDWARD HENRY LOMAS, of Rodney Wharf, Church Road, Parish of Battersea, County of Surrey, for an invention for—"Improvements in the action of charger or measure for powder flasks, canisters or other vessels." *Complete specification; Letters Patent sealed.*

POLKINGHORNE. 12th March 1863.

679. JAMES POLKINGHORNE, of Redruth, in the County of Cornwall, Tin Smelter, for an invention for—"Improvements in treating tin ores and in apparatus for treating ores and matters containing arsenic." *Letters Patent sealed.*

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BARLOW. 13th March 1863.

680. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Certain improvements in looms for weaving."—*A communication to him from abroad by Alexander Frey, of New York, in the United States of America, Manufacturer.* *Letters Patent sealed.*

HARRIS. BUTLER. FRASER. 13th March 1863.

681. JOHN HARRIS, of Pontypool, in the County of Monmouth, Iron Plate Roller, and JOSEPH BUTLER, of Pontypool, aforesaid, Iron Manufacturer, and JOHN HENRY FRASER, of Llanvrechva Upper, in the County of Monmouth, aforesaid, Manufacturer, for an invention for—"Improvements in machinery for rolling armour plates, bridge plates, boat plates, and other plates and bars of iron." *Letters Patent sealed.*

LUTWYCHE. LUTWYCHE. 13th March 1863.

682. CHARLES THOMAS LUTWYCHE, of Birmingham, in the County of Warwick, Manufacturer, and ALFRED LUTWYCHE, of Birmingham, aforesaid, Manufacturer, for an invention for—"An improvement or improvements in metallic pens." *Letters Patent sealed.*

TAYLOR. 13th March 1863.

683. JOHN TAYLOR, of Burnley, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in fire bars and bearers." *Provisional protection only.*

BOURREIFF. 13th March 1863.

684. JEAN BAPTISTE MARIE AMÉDÉE BOURREIFF, of Paris, Rue des Petites Ecuries, No. 12, in the French Empire, Manufacturer, for an invention for—"Improvements in transferring by the means of typography colours and metals on surfaces in general." *Provisional protection only.*

STÜBBE. 13th March 1863.

685. WILLIAM HERMANN STÜBBE, of the City and State of New York, United States of America, for an invention for—"Improvements in governors for marine and other engines." *Provisional protection only.*

WYDLER. THORNTON. 13th March 1863.

686. ALBERT WYDLER, of Belfield Print Works, near Rochdale, in the County of Lancaster, Calico Printer, and CHRISTOPHER THORNTON, of the same place, Manager, for an invention for—"Improvements in printing and dyeing woollen fabrics." *Provisional protection only.*

JOHNSON. 13th March 1863.

687. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in fastenings suitable for portions of harness and other purposes."—*A communication to him from abroad by Victor Gueldry, of Paris, in the Empire of France.* *Letters Patent sealed.*

SMITH. 13th March 1863.

688. WILLIAM SMITH, of Little Woolstone, in the County of Bucks, Farmer, for an invention for—"Improvements in machinery for cultivating land and sowing seed." *Letters Patent sealed.*

GEDGE. 14th March 1863.

689. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved plough."—*A communication to him from abroad by Jean Germain Felix Clamageran, of La Lambertre, Gironde, France.* *Provisional protection only.*

RUDRUM. 14th March 1863.

690. FREDERICK RUDRUM, of Lady's Lane, in the City of Norwich, for an invention for—"An apparatus for registering." *Provisional protection* NOT *granted.*

WEST. 14th March 1863.

691. WILLIAM WEST, of Tredenham House, St. Blazey, in the County of Cornwall, Civil Engineer, for an invention for—"Improvements in valves." *Letters Patent sealed.*

PAGE. 14th March 1863.

692. JOHN PAGE, of Liverpool, in the County of Lancaster, Civil Engineer, for an invention for—"Improvements in taps or valves." *Letters Patent sealed.*

McCARTER. 14th March 1863.

693. JOHN WALKER McCARTER, of the Foyle Street Saw Mills, Londonderry, in the County of Londonderry, Ireland, for an invention for—"Improvements in machinery for sawing or cutting wood." *Letters Patent sealed.*

TANGYE. 14th March 1863.

694. JOSEPH TANGYE, of the firm of Tangye Brothers, and Price, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in portable hydraulic punching-machines." *Letters Patent sealed.*

ALEXANDER. 14th March 1863.

695. ROBERT ALEXANDER, of Islington, Liverpool, in the County of Lancaster, for an invention for—"Improvements in mariners' compasses and the parts in connection therewith, and in the application thereof to magnetic instruments." *Letters Patent sealed.*

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RICHARDSON. 14th March 1863.

696. JAMES COXON RICHARDSON, of Swansea, in the County of Glamorgan, Merchant, for an invention for—"Improvements in the construction of ships."
Provisional protection only.

YOUNG. 14th March 1863.

697. WILLIAM YOUNG, of 77, Fleet Street, in the City of London, for an invention for—"Improvements in type composing and distributing machines."
Letters Patent sealed.

MORELAND. 14th March 1863.

698. RICHARD MORELAND, junior, of Old Street, Saint Luke's, in the County of Middlesex, for an invention for—"Improvements in apparatus for making extracts of hops and for selecting or separating the seeds and pollen from hops."
Provisional protection only.

WALWORTH. 14th March 1863.

699. JAMES WALWORTH, of Bradford, in the County of York, Corn Mill Machine Maker, for an invention for—"Improvements in machinery or apparatus for washing or cleansing and drying Egyptian wheat, beans, and other kinds of grain or seeds."
Letters Patent sealed.

BOALER. 14th March 1863.

700. WILLIAM BOALER, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in the preparation of coloring matters for dyeing and printing."—*A communication to him from abroad by Robert Hodgson Gratrix, of New York, in the United States of America.* *Provisional protection only.*

OLIVER. MYERS. 16th March 1863.

701. EDWARD OLIVER, Engineer, and GEORGE MYERS, Draughtsman, both of Rotherham, in the County of York, for an invention for—"Improvements in apparatus for lowering and disengaging boats from vessels."
Provisional protection only.

HOYOS. 16th March 1863.

702. FELIX HOYOS, of Paris, Rue de Chaillot, No. 42, in the French Empire, Manufacturer, for an invention for—"An improved stove or fire grate for heating, cooking, boiling or other similar purposes." *Letters Patent sealed.*

WILLETT. 16th March 1863.

703. THOMAS WILLIAM WILLETT, of 31, Charing Cross, in the County of Middlesex, Captain, for an invention for—"Improvements in means for reefing and furling square sails of ships and vessels from the decks thereof."
Letters Patent sealed.

VERNON. 16th March 1863.

704. WILLIAM VERNON, of the Town and County of the Town of Nottingham, Lace Manufacturer, for an invention for—"A new or improved means or apparatus for communicating signals or intelligence to or from railway trains or other similar conveyances, whether they be stationary or in motion." *Provisional protection only.*

BELEY. 16th March 1863.

705. GEORGE PARSONS BELEY, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in discharging projectiles below the water line of navigable vessels and other structures."
Provisional protection only.

POWELL. 16th March 1863.

706. THOMAS POWELL, of No. 30, Prince's Terrace, Regent's Park, London, in the County of Middlesex, for an invention for—"An improved chopping-block for butchers." *Letters Patent sealed.*

SMETHURST. 16th March 1863.

707. JOHN SMETHURST, of Royton, in the County of Lancaster, Coal Proprietor and Mill Owner, for an invention for—"Improvements in the construction of ships and vessels for the purpose of obtaining additional strength and motive-power."
Provisional protection only.

NEWTON. 16th March 1863.

708. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of iron and steel."—*A communication to him from abroad by Emile Guillaume Boignes and Paul Rambourg, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

EAVESTAFF. 16th March 1863.

709. WILLIAM GLEN EAVESTAFF, of Great Russell Street, in the County of Middlesex, Pianoforte Manufacturer, for an invention for—"Improvements in the construction of pianofortes." *Letters Patent sealed.*

BRIERLEY. GREENWOOD. 17th March 1863.

710. JOHN HENRY BRIERLEY, of 58, Aldermanbury, London, and Beech Hill Mills, Halifax, Yorkshire, and BARZILLAI GREENWOOD, of 5, Church Road, New Cross, London, for an invention for—"An 'all England's cricketers' clasp."
Provisional protection NOT *granted.*

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BRIERLEY. GREENWOOD. 17th March 1863.

711. JOHN HENRY BRIERLEY, of 58, Aldermanbury, London, and Beech Hill Mills, Halifax, Yorks., and BARZILLAI GREENWOOD, of 5, Church Road, New Cross, London, for an invention for—"An album belt."
Provisional protection NOT *granted.*

ATKINSON. 17th March 1863.

712. WILLIAM HENRY ATKINSON, of the Cavendish Club, Regent Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in studs or fastenings adapted to holding together parts of shirt fronts, wristbands, collars, gloves and other articles of wearing-apparel."
Letters Patent sealed.

GEDGE. 17th March 1863.

713. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the modes or means for framing pictures, looking-glasses and other objects."—*A communication to him from abroad by Antoine Auvray, of Olivet, Loiret, France.*
Letters Patent sealed.

EMETT. 17th March 1863.

714. WILLIAM HENRY EMETT, of 8, St. George's Terrace, South Kensington, in the County of Middlesex, Lithographer, for an invention for—"Improvements in processes for facilitating and combining the art of writing with engraving together on stone, applicable to maps, plans, specifications and other lithography, which improvements are also available for retransfers to zinc or stone, or printing from original."
Letters Patent sealed.

COX. 17th March 1863.

715. JOHN COX, of Gorgie Mills, in the County of Edinburgh, Glue Maker, for an invention for—"Improvements in swimming baths and in apparatus for swimming, part of which apparatus is applicable to sailing or moving vessels in a circle."
Letters Patent sealed.

NEWTON. 17th March 1863.

716. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved preparation for the cure of scab, foot-rot and other diseases of sheep and cattle."—*A communication to him from abroad by Patrick Hayes, of Melbourne, in the Colony of Victoria, Chemical Manufacturer.*
Letters Patent sealed.

DE LAIRE. 17th March 1863.

717. GEORGES DE LAIRE, of the Imperial Mint, Paris, in the Empire of France, Chemist, for an invention for—"Improvements in the manufacture of brown coloring matters."—*The result partly of communication made to him from abroad by the inventor Charles Girard, of Lyons, France, Chemist, and partly of invention and discovery made by himself.*
Letters Patent sealed.

MILLER. 17th March 1863.

718. THOMAS NOTTAGE MILLER, of Bishop Stortford, in the County of Herts, for an invention for—"Improvements in heating horticultural buildings."
Provisional protection only.

SYMINGTON. 18th March 1863.

719. WILLIAM SYMINGTON, of Market Harborough, in the County of Leicester, for an invention for—"Improvements in the process of and apparatus used in roasting and treating coffee and other organic substances."
Letters Patent sealed.

WILD. RANDEL. 18th March 1863.

720. WILLIAM CHARLES WILD, and JAMES HENRY RANDEL, both of Birmingham, in the County of Warwick, Dealers in Precious Stones, for an invention for—"A new and improved mode of inlaying gold and other metals in glass, and in a composition suitable for the manufacture of jewellery and other ornaments, buttons and other similar articles."
Letters Patent sealed.

DONBAVAND. CRICHTON. 18th March 1863.

721. WILLIAM DONBAVAND, of the City of Manchester, in the County of Lancaster, Scale Beam and Weighing Machine Manufacturer, and DAVID CRICHTON, of the same place, Machinist, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

ROBERTS. NAYLOR. 18th March 1863.

722. JOHN ROBERTS, of the City of Manchester, in the County of Lancaster, Organ Builder, and ROBERT NAYLOR, of the same place, Gentleman, for an invention for—"Improvements in organs, harmoniums and pianofortes."
Provisional protection only.

BROOMAN. 18th March 1863.

723. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of spoons and forks."—*A communication to him from abroad by Wilhelm Conraetz and Fritz Dittler, of Vienna, Austria.*
Letters Patent sealed.

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RICHMOND. CHANDLER. RICHMOND. 18th March 1863.

724. FRANCIS RICHMOND, HENRY CHANDLER, and JAMES GADSBY RICHMOND, all of Salford, in the County of Lancaster, Agricultural Implement Makers, for an invention for—"Improvements in machinery for washing potatoes and other vegetables." *Letters Patent sealed.*

TAYLOR. 18th March 1863.

725. WILLIAM EDWARD TAYLOR, of Enfield, near Accrington, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in machinery for reeling, winding, warping and beaming yarn." *Provisional protection only.*

KILSHAW. 18th March 1863.

726. HENRY KILSHAW, of Haslingden, in the County of Lancaster, Cotton Spinner, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

WREN. 18th March 1863.

727. BENJAMIN WREN, of Stockton-upon-Tees, in the County of Durham, Corn Miller, for an invention for—"Improvements in cleansing and treating certain descriptions of wheat and other grain." *Letters Patent sealed.*

LEGRIS. 18th March 1863.

728. ERNEST LEGRIS, of Bondeville, in the Department of the Seine Inférieure, in the Empire of France, Engineer, for an invention for—"A new or improved machine for thrashing out the seed of flax." *Provisional protection only.*

OLDKNOW. 18th March 1863.

729. THOMAS OLDKNOW, of Ashforth's Factory, in the Town and County of the Town of Nottingham, General Mechanist, for an invention for—"Improvements in the construction of jacquards employed in bobbin net or twist lace machines." *Letters Patent sealed.*

NORRINGTON. 18th March 1863.

730. FREDERICK NORRINGTON, of Tavistock, Devon, for an invention for—"Improvements in girths or bands and knee caps for horses." *Letters Patent sealed.*

LORBERG. 18th March 1863.

731. WILLIAM LORBERG, of Wylds Rents, Bermondsey, in the County of Surrey, Analytical Chemist, for an invention for—"Improvements in the treatment of rags and obtaining valuable chemical products from the animal fibre therein." *Provisional protection only.*

MOREL. 18th March 1863.

732. AUGUSTE MOREL, of Rue du Marché, Brussels, in the Kingdom of Belgium, Engineer, for an invention for—"Improvements in apparatus for generating carbonic acid." *Letters Patent sealed.*

WELCH. WELCH. 18th March 1863.

733. JOHN DAVIS WELCH, and ALFRED PHIPPEN WELCH, both of Gutter Lane, in the City of London, and of Luton, in the County of Bedford, Straw Hat Manufacturers, for an invention for—"Improvements in bleaching and in reducing and brightening the color or tone of dyed straw plaits and straw." *Provisional protection only.*

HASELTINE. 19th March 1863.

734. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of boots and shoes."—*A communication to him from abroad by Henry Port, of the City of New York, United States of America.* *Complete specification; Letters Patent sealed.*

LEVER. 19th March 1863.

735. ELLIS LEVER, of the City of Manchester, in the County of Lancaster, Manufacturer of Colliery Brattice Cloth and Flexible Tubing, for an invention for—"An improved composition for the coating and preservation of canvass and other materials to make them waterproof and non-inflammable. *Letters Patent sealed.*

WILDE. 19th March 1863.

736. HENRY WILDE, of the City of Manchester, Engineer, for an invention for—"Improvements in the construction of steam-boilers." *Letters Patent sealed.*

HAUGHTON. 19th March 1863.

737. HENRY OSBURNE HAUGHTON, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in machinery for drying and cooling grain and seeds."—*A communication to him from abroad by Jesse Brown Wheeler and Simeon Losee, both of New York, in the United States of America.* *Letters Patent sealed.*

SAUNDERS. PIPER. 19th March 1863.

738. JOHN SAUNDERS, and JOSEPH PIPER, of Cookley Iron Works, Kidderminster, for an invention for—"Improvements in apparatus employed in the manufacture of tin and terne plates." *Letters Patent sealed.*

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CROCKER.
19th March 1863.

739. SAMUEL LEONARD CROCKER, of Taunton, in the County of Bristol, and State of Massachusetts, of the United States of America, for an invention for—"A new and useful or improved yellow metal sheathing nail or spike, which by means of a nail cutting engine is cut from yellow sheathing metal."
Complete specification; Letters Patent sealed.

WEBSTER.
FORGIE.
19th March 1863.

740. CHARLES WEBSTER, of New Radford, in the County of Nottingham, Locksmith, and WILLIAM FORGIE, of Nottingham, in the County of Nottingham, Lace Cap Manufacturer, for an invention for—"Improvements in apparatus for the purpose of clearing out the interior of foul chimnies or flues when on fire or otherwise."
Letters Patent sealed.

SMITH.
19th March 1863.

741. GEORGE HENRY SMITH, of Ipswich, in the County of Suffolk, Machinist, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

REAY.
20th March 1863.

742. WILLIAM REAY, junior, of Thropton Hill, near Rothbury, in the County of Northumberland, Mining Engineer, for an invention for—"An improved machine for amalgamating minerals and other metalliferous and metallurgical products or substances." *Provisional protection only.*

COUCHMAN.
20th March 1863.

743. RICHARD COUCHMAN, of 26, Noble Street, St. Martin's le Grand, in the City of London, Manufacturer, for an invention for—"Improvements in articles or means for supporting or carrying ladies' parasols, bags or other articles or appendages."
Provisional protection only.

BARCLAY.
MORTON.
20th March 1863.

744. ANDREW BARCLAY, and ALEXANDER MORTON, Engineers, both of Kilmarnock, in the County of Ayr, North Britain, for an invention for—"Improvements in certain apparatus for injecting and ejecting fluids. *Provisional protection only.*

NIELD.
NIELD.
20th March 1863.

745. JOHN NIELD, Iron Founder, and THOMAS ARTHUR NIELD, Engineer, both of Dukinfield, in the County of Chester, for an invention for—"Improvements in core barrels." *Letters Patent sealed.*

BROOMAN.
20th March 1863.

746. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for beating and drying wool and other textile and filamentous substances."—*A communication to him from abroad by Louis César Carlier Vitu, of Ribemont, France.*
Letters Patent sealed.

HOUGHTON.
20th March 1863.

747. VASCONCELLOS HOUGHTON, of No. 2, Merton Road, Kensington, in the County of Middlesex, for an invention for—"Improvements in lamps and lamp wicks."—*The result partly of a communication from abroad made to him by David Eldon Hall, a person resident at Brooklyn, New York, in the United States of America, and partly of invention and discovery made by himself.*
Provisional protection only.

WILSON.
20th March 1863.

748. GEORGE WILSON, of Cyclops Steel and Iron Works, in the Borough of Sheffield, in the County of York, Engineer, for an invention for—"An improvement in the manufacture of springs." *Provisional protection only.*

COLES.
JAQUES.
FANSHAWE.
20th March 1863.

749. GEORGE COLES, of Gresham Street West, in the City of London, Merchant, JAMES ARCHIBALD JAQUES, of Tottenham, in the County of Middlesex, Chemist, and JOHN AMERICUS FANSHAWE, of the same place, Engineer, for an invention for —"Improvements in machines or apparatus for washing and wringing clothes or fabrics." *Letters Patent sealed.*

PRYSE.
KIRKWOOD.
20th March 1863.

750. CHARLES PRYSE, of Birmingham, in the County of Warwick, Manufacturer, and DAVID KIRKWOOD, of the same place, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms, part of which improvements are also applicable to other descriptions of fire-arms." *Letters Patent sealed.*

BRIGHAM.
BICKERTON.
20th March 1863.

751. JOHN BRIGHAM, and RICHARD BICKERTON, of the Town and County of Berwick-upon-Tweed, North Britain, Implement Makers, for an invention for—"Improvements in reaping or mowing machines." *Letters Patent sealed.*

DE WYLDÉ.
20th March 1863.

752. FÉNOR DE WYLDÉ, of Trinity Square, Tower Hill, in the County of Middlesex, for an invention for—"Improvements in the manufacture of cement from gypsum." *Letters Patent sealed.*

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EVANS. GRIFFITHS. 21st March 1863.	**753.** ISAAC MARK EVANS, of Cefn Mawr, in the County of Denbigh, and WILLIAM THOMAS GRIFFITHS, of Merthyr Tydvil, in the County of Glamorgan, for an invention for—"Improved means for ventilating mines." *Provisional protection only.*
ROBERTS. ROBERTS. 21st March 1863.	**754.** FREDERICK ROBERTS, and ALEXANDER ROBERTS, both of No. 5, Victoria Cottages, Barton Terrace, Gloucester, in the County of Gloucester, for an invention for—"Improvements in agricultural implements and in apparatus for working the same." *Letters Patent sealed.*
DE GROOTE. 21st March 1863.	**755.** CHARLES DE GROOTE, of the City of Brussels, in the Kingdom of Belgium, Shorthand Writer, for an invention for—"Improvements in the construction of lamps with circular burners or wicks for the combustion of petroleum, schist and other volatile oils, parts of said improvements being applicable to gas-burners, night lights, and lamps burning spirits and animal oils." *Provisional protection only.*
BIDDELL. 21st March 1863.	**756.** GEORGE ARTHUR BIDDELL, of Ipswich, in the County of Suffolk, Mechanical Engineer, for an invention for—"Improvements in locomotives usually called Traction engines, to be used on common roads." *Letters Patent sealed.*
HARTLEY. CLEGG. MELLODEW. MELLODEW. 21st March 1863.	**757.** EDMUND HARTLEY, of Oldham, in the County of Lancaster, Mechanical Engineer, JOHN CLEGG, of the same place, Machinist, and THOMAS MELLODEW, and JAMES MELLODEW, of the same place, Manufacturers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*
HETHERINGTON. 21st March 1863.	**758.** JOHN MUIR HETHERINGTON, of Manchester, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery or apparatus for combing cotton and other fibrous materials." *Letters Patent sealed.*
APPLEGATE. 21st March 1863.	**759.** FRANK APPLEGATE, of Bradford-on-Avon, in the County of Wilts, Woollen Manufacturer, for an invention for—"Apparatus for making certain indications in railway carriages." *Provisional protection only.*
APPLEGATE. 21st March 1863.	**760.** FRANK APPLEGATE, of Bradford-on-Avon, in the County of Wilts, Woollen Manufacturer, for an invention for—"Improvements in time indicators." *Provisional protection only.*
CLARK. 21st March 1863.	**761.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the separation or obtaining of ammonia from azoted matters in the preparation of manure."—*A communication to him from abroad by Lucien Henry Blanchard, Merchant, and Théodore Chateau, Chemist, both of 29, Boulevart St. Martin, Paris. Letters Patent sealed.*
HANCOCK. 23rd March 1863.	**762.** HENRY HANCOCK, of 208, High Street, Southwark, in the County of Surrey, for an invention for—"A new combined range for making gas, cooking by gas, and lighting, especially applicable for ships." *Provisional protection only.*
ROTHWELL. ROTHWELL. 23rd March 1863.	**763.** JOHN WILLIAM HUGHES ROTHWELL, and EDMUND JAMES ROTHWELL, of Ramsbottom, in the County of Lancaster, Cotton Spinners, for an invention for—"Improvements in heating the feed water of steam-boilers." *Provisional protection only.*
JOHNSTON. 23rd March 1863.	**764.** WILLIAM JOHNSTON, of Glasgow, in the County of Lanark, North Britain, Metal Merchant, for an invention for—"Improvements in apparatus for lighting and heating." *Letters Patent sealed.*
GRANT. 23rd March 1863.	**765.** THOMAS GEORGE GRANT, of the Royal Clarence Yard, Gosport, in the County of Hants, for an invention for—"Improvements in ovens and apparatus for heating the same." *Letters Patent sealed.*
EYLES. 23rd March 1863.	**766.** JULIA EYLES, of George Street, Portman Square, in the County of Middlesex, Milliner and Dress Maker, for an invention for—"Improvements in cheffonier bedsteads." *Provisional protection only.*
CLARK. 23rd March 1863.	**767.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in agricultural apparatus."—*A communication to him from abroad by Jean Baptiste Décours, Agriculturist, Athanase Charles Le Lavandier, Architect, and Pierre Edouard Lambert, Mechanician, all of 29, Boulevart St. Martin, Paris. Letters Patent sealed.*

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COOK.
24th March 1863.

768. HENRY COOK, of Sunderland Terrace, Westbourne Park, in the County of Middlesex, for an invention for—"Improvements in the arrangement and construction of apparatus for transmitting electric currents and signals for telegraphic purposes."—*The result partly of a communication from abroad made to him by Gaetano Bonelli, of Milan, and partly of invention and discovery made by him.*
Provisional protection only.

REILLY.
MARTIN.
24th March 1863.

769. JAMES REILLY, of the New Globe Chair and Cabinet Works, Barrack Street, Hulme, Manchester, in the County of Lancaster, and WILLIAM MARTIN, of Manchester, aforesaid, for an invention for—"Improvements in lubricating horizontal shafting and bearings of all descriptions."
Letters Patent sealed.

DAVIES.
24th March 1863.

770. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in wrappers or papers for needles and in machinery or apparatus for sticking needles therein."—*A communication to him from abroad by George Penrice, Farmer, of Philadelphia, Pennsylvania, in the United States of America.*
Letters Patent sealed.

HEALEY.
24th March 1863.

771. SAMUEL HEALEY, of Elizabeth Street, Hackney Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of zinc and in the apparatus employed therein."
Provisional protection only.

WILLIAMS.
24th March 1863.

772. HENRY WILLIAMS, of Portmadoc, in the County of Carnarvon, Engineer, for an invention for—"Improvements in machinery or apparatus for dressing slates."
Provisional protection only.

TOPHAM.
TOPHAM.
TOPHAM.
24th March 1863.

773. ALFRED TOPHAM, JOSEPH TOPHAM, and JABEZ TOPHAM, all of St. Pierre les Calais, in the Empire of France, Lace Manufacturers, for an invention for—"Improvements in the manufacture of ornamental twist lace and in machinery used therein."
Letters Patent sealed.

KIRKHAM.
24th March 1863.

774. JOHN KIRKHAM, of the Euston Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of iron and steel."
Provisional protection only.

COOKE.
24th March 1863.

775. ARTHUR JOHN COOKE, of Crown Court, Bow Street, in the County of Middlesex, for an invention for—"Improvements in portable 'Hooka' pipes."
Provisional protection only.

WHITE.
25th March 1863.

776. JOHN WHITE, of Finchley, in the County of Middlesex, Surgeon, for an invention for—"Improvements in protecting the surface of the iron and steel of ships and all other structures, except that of cables, tanks and boilers, while in contact with water, from decay, in preventing or abating and in facilitating the removal of foulness of ships' bottoms, and in giving a capacity of increased speed to ships."
Provisional protection only.

PHILLIPPS.
25th March 1863.

777. MICHAEL PHILLIPPS, of Dewsall, near Hereford, in the County of Hereford, Engineer, for an invention for—"Improvements in the manufacture of iron or other metallic rod and wire, and in the machinery or apparatus employed in such manufacture."
Provisional protection only.

LEACH.
ANDERSON.
25th March 1863.

778. JOHN LEACH, of Ashton-under-Lyne, in the County of Lancaster, Cotton Spinner, and JOHN ANDERSON, of the same place, Manager, for an invention for—"Certain improvements in machinery or apparatus for preparing and spinning cotton and other fibrous substances."
Letters Patent sealed.

WOHRALL.
25th March 1863.

779. JOSEPH HARDMAN WOHRALL, of Bacup, in the County of Lancaster, Surgeon, for an invention for—"Certain improvements in the method of producing surfaces in imitation of woods, and in printing therefrom."
Letters Patent sealed.

STUART.
25th March 1863.

780. GEORGE STUART, of Glasgow, in the County of Lanark, North Britain, Commission Merchant, for an invention for—"Improvements in bleaching jute fibre."
Letters Patent sealed.

MONSON.
25th March 1863.

781. CHARLES MONSON, of New Haven, in the County of New Haven, and State of Connecticut, United States of America, for an invention for—"An improved gravitation engine."
Letters Patent sealed.

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ARMITAGE. SENIOR. 25th March 1863.

782. RICHARD ARMITAGE, of Huddersfield, in the County of York, and CHARLES SENIOR, of Dead Waters, near Huddersfield, aforesaid, Engineers, for an invention for—"Improvements in means or apparatus for stretching fabrics." *Letters Patent sealed.*

JOHNSON. 25th March 1863.

783. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of zinc and in the apparatus employed therein."—*A communication to him from abroad by Adrien Muller, of Paris, in the Empire of France, Manufacturer.* *Provisional protection only.*

GORE. 25th March 1863.

784. THOMAS WILSON GORE, of New Whittington, in the County of Derby, Builder, for an invention for—"An improved method of uniting earthenware, metal and other pipes." *Provisional protection only.*

BROOMAN. 25th March 1863.

785. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of cords, ropes and cables, and in machinery employed therein, applicable also to spinning, winding and twisting fibrous and filamentous substances."—*A communication to him from abroad by Jean Antoine de Maniquet, of Paris, France.* *Letters Patent sealed.*

KEY. 25th March 1863.

786. GILBERT TROWARD KEY, Lieutenant in Her Majesty's Royal Navy, of Portsmouth, in the County of Hants, for an invention for—"Improvements in fog and other signals." *Complete specification; Letters Patent sealed.*

CHRISTOFLEAU. 26th March 1863.

787. LOUIS CHRISTOFLEAU, of No. 60, Boulevart de Strasbourg, Paris, in the Empire of France, Blacksmith, for an invention for—"Improvements in fire-arms." *Letters Patent sealed.*

MUSHET. 26th March 1863.

788. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in treating steel and iron prepared by the pneumatic process." *Letters Patent sealed.*

COWDERY. 26th March 1863.

789. GEORGE COWDERY, of Llanymynech, in the County of Salop, Civil Engineer, for an invention for—"Improvements in machinery for making bricks." *Letters Patent sealed.*

PARNELL. 26th March 1863.

790. MICHAEL LEOPOLD PARNELL, of 283, Strand, in the County of Middlesex, for an invention for—"Improvements in the construction of locks and in the method of adjusting their spindles." *Letters Patent sealed.*

HALL. 26th March 1863.

791. NATHANIEL RICHARD HALL, of Rosherville, Northfleet, in the County of Kent, for an invention for—"Improvements in construction of weighing-apparatus." *Letters Patent sealed.*

JOHNSON. 26th March 1863.

792. WILLIAM JOHNSON, of the firm of Johnson and Rowe, of Warwick Square, in the City of London, Manufacturers, for an invention for—"Improvements in pocket books, purses, wallets and bill cases." *Letters Patent sealed.*

PARKINSON. WOOD. 26th March 1863.

793. THOMAS PARKINSON, of Manchester, in the County of Lancaster, Salesman to Messrs. F. W. Ashton and Compy., and JOHN WOOD, of the same place, Embroiderer, for an invention for—"An improved application of embroidery to cotton printed fabrics." *Provisional protection only.*

TOD. PATERSON. 26th March 1863.

794. WILLIAM TOD, and ROBERT PATERSON, of Glasgow, in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements in portable apparatus for working drills and other instruments." *Provisional protection only.*

DAVIES. 26th March 1863.

795. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in engraving upon metals."—*A communication to him from abroad by Louis Charles Emile Vial, of Paris, in the Empire of France, Chymist.* *Letters Patent sealed.*

JOHNSON. 26th March 1863.

796. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in furnaces or fire-places and in apparatus to be used in connection therewith."—*A communication to him from abroad by Louis Hebert, of Paris, in the Empire of France, Engineer.* *Provisional protection only.*

NORTON. 26th March 1863.

797. JOHN NORTON, of Bray, in the County of Wicklow, Ireland, Esquire, for an invention for—"Improvements in projectiles or ignition missiles." *Letters Patent sealed*

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BLAKE.
26th March 1863.

798. WILLIAM BLAKE, of Glasgow, in the County of Lanark, North Britain, Manufacturing Stationer, for an invention for—"Improvements in the manufacture of labels for luggage and other articles." *Letters Patent sealed.*

APPLEGATE.
26th March 1863.

799. FRANK APPLEGATE, of Bradford-on-Avon, in the County of Wilts, Woollen Manufacturer, for an invention for—"Improvements in railway carriage doors. *Provisional protection only.*

EASTON.
26th March 1863.

800. EDWARD EASTON, of the Grove, Southwark, in the County of Surrey, Engineer, for an invention for—"An improved application of hydraulic apparatus for lowering full casks and other goods, and raising empty casks or vessels." *Provisional protection only.*

GRANTHAM.
27th March 1863.

801. JOHN GRANTHAM, of 31, Nicholas Lane, in the City of London, Civil Engineer, for an invention for—"Improvements in apparatus connected with machinery used in manufacturing compressed fuel." *Letters Patent sealed.*

MORGAN.
27th March 1863.

802. WILLIAM MILLINGTON MORGAN, of Kidderminster, in the County of Worcester, Manufacturer, for an invention for—"Improvements in coating metals and in machinery and apparatus employed in coating metals." *Letters Patent sealed.*

BROOMAN.
27th March 1863.

803. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for scouring wool."—*A communication to him from abroad by Jean Henri Chaudet, of Rouen, France, and Firmin Natalis Thuillier, of Amiens, France.* *Letters Patent sealed.*

TAYLOR.
27th March 1863.

804. JOHN TAYLOR, junior, of Parliament Street, Westminster, for an invention for—"Improvements in the construction and arrangement of the rain water pipes for buildings." *Letters Patent sealed.*

CLARK.
27th March 1863.

805. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in winding or copping frames."—*A communication to him from abroad by Jean Jacques Bourcart, Engineer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

ASQUITH.
GREENWOOD.
27th March 1863.

806. JAMES DIXON ASQUITH, and GEORGE GREENWOOD, both of Morley, near Leeds, in the County of York, for an invention for—"Improvements in rag machines." *Provisional protection only.*

KING.
MARSHALL.
27th March 1863.

807. JOHN KING, of Chadshunt Farm, near Kineton, and THOMAS HENRY MARSHALL, of Combrooke, both in the County of Warwick, for an invention for—"Improvements in machinery and apparatus for preparing land for seed and for harrowing land." *Letters Patent sealed.*

GOODE.
28th March 1863.

808. BENJAMIN WILLIAM GOODE, of St. Paul's Square, Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new journal axle or bearing particularly applicable to rolls." *Letters Patent sealed; specification filed by order.*

PERRY.
28th March 1863.

809. ARCHIBALD HEWISON PERRY, of Guildford Road, Brighton, Railway Inspector, for an invention for—"Improvements in working railway points, switches and signals, and in the apparatus to be employed for that purpose." *Provisional protection only.*

SIMS.
28th March 1863.

810. REUBEN SIMS, of the firm of Picksley, Sims and Company, the Bedford Foundry, Leigh, in the County of Lancaster, Agricultural Implement Makers and Iron Founders, for an invention for—"Improvements in reaping and mowing machines, part of which improvements are applicable to horse works." *Provisional protection only.*

LEEMING.
MARKINDALE.
28th March 1863.

811. JAMES LEEMING, and RICHARD SHIERS MARKINDALE, Worsted Spinners, of Broughton, in the County of Lancaster, for an invention for—"An improvement in carding-engines." *Letters Patent sealed.*

BLOUIN.
MERCIER.
28th March 1863.

812. ALFRED BLOUIN, of No. 79, Rue du Faubourg du Temple, in the City of Paris, Mechanician, and DIDIER NICOLAS MERCIER, of No. 10, Rue Richelieu, in the said City of Paris, Medical Doctor, for an invention for—"An improved axletree with linked levers for lifting." *Provisional protection only.*

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SYMONS. 28th March 1863. — **813.** WILLIAM SYMONS, of Hatton Garden, in the County of Middlesex, Philosophical Instrument Maker, for an invention for—"Improvements in barometers." *Letters Patent sealed.*

THOMAS. 28th March 1863. — **814.** GRIFFITH THOMAS, of No. 50, Chichester Villas, Kilburn Park, in the County of Middlesex, Builder, for an invention for—"Improvements in window shutters and window blinds." *Provisional protection only.*

DALE. BISCHOF. 28th March 1863. — **815.** JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, and GUSTAV BISCHOF, junior, of Swansea, in the County of Glamorgan, Chemist, for an invention for—"Improvements in the manufacture of aniline, napthylamine and other analogous bodies, and in apparatus connected therewith, which apparatus is also applicable to obtaining finely divided metallic iron for other purposes." *Letters Patent sealed.*

MUSGRAVE. 30th March 1863. — **816.** JOSEPH MUSGRAVE, of the Globe Works, Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction of steam-boilers." *Letters Patent sealed.*

BARNES. 30th March 1863. — **817.** THOMAS BARNES, Earl of Dundonald, of No. 12, Queen's Gate, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in treating fats and fatty oils, and volatile oils or essential oils." *Provisional protection only.*

MUSHET. 30th March 1863. — **818.** ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in moulds to be used for casting steel or homogeneous iron." *Letters Patent sealed.*

HUGHES. 30th March 1863. — **819.** HESKETH HUGHES, of Homerton, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery for shaping metal and plastic substances." *Letters Patent sealed.*

CARVER. 30th March 1863. — **820.** JAMES CARVER, of the firm of Messieurs Carver and Mosley, of "The Butcher Street Works," in the Town and County of the Town of Nottingham, Bobbin and Carriage Manufacturers, for an invention for—"Improvements in the manufacture of carriages employed in machines for the making of lace or other fabrics." *Letters Patent sealed.*

NEWTON. 30th March 1863. — **821.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved process for producing yellow coloring matters and other color which may be derived therefrom."—*A communication to him from abroad by David Clovis Knab, of Colmar, in the Empire of France.* *Letters Patent sealed.*

AGER. 30th March 1863. — **822.** WILSON AGER, of the City of New York, in the United States of America, Engineer, for an invention for—"Improvements in machinery or apparatus for cleaning and decorticating grain." *Provisional protection* NOT *granted.*

PAYNE. 30th March 1863. — **823.** JAMES PAYNE, of Kirkcudbright, North Britain, Ironmonger, for an invention for—"Improvements in fire-escapes." *Provisional protection only.*

HUGHES. 31st March 1863. — **824.** EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved composition for rendering cloth, paper and similar articles transparent and waterproof."—*A communication to him from abroad by James Hodgskin, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

SMETHURST. 31st March 1863. — **825.** JOHN SMETHURST, of Royton, in the County of Lancaster, Coal Proprietor and Mill Owner, for an invention for—"Improvements in steam-engines and boilers, part of which improvements is applicable to heating purposes." *Letters Patent sealed.*

MAURAND. 31st March 1863. — **826.** AMEDÉE BARTHELEMI DONAT MAURAND, of No. 15, Passage des Petites Ecuries, Paris, Gentleman, for an invention for—"A translucid cylindric apparatus for bringing the former weights and measures into those of the present decimal system most easily and precisely, and vice versâ." *Letters Patent sealed.*

FURNIVAL. 31st March 1863. — **827.** RICHARD FURNIVAL, of the City of Manchester, in the County of Lancaster, Machine and Tool Maker, for an invention for—"Improvements in and applicable to platting or braiding machines." *Provisional protection only.*

FORREST. DUCKWORTH. 31st March 1863. — **828.** WILLIAM FORREST, Cotton Spinner, and HINDLE DUCKWORTH, Machinist, both of Blackburn, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

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BELL.
BELL.
31st March 1863.

829. ARCHIBALD HAMILTON BELL, of Dover, in the County of Kent, Lieutenant in the Royal Artillery, and VALENTINE GRÆME BELL, of Woburn Place, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of constructing the armour of vessels of war." *Provisional protection only.*

BROOMAN.
31st March 1863.

830. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in electric telegraph printing apparatus."—*A communication to him from abroad by Theodore Auguste Marie Sortais, of Lisieux, France.* *Letters Patent sealed.*

COE.
31st March 1863.

831. ERNEST OSWALD COE, of Brook Street, Grosvenor Square, in the County of Middlesex, for an invention for—"Improvements in propellers for ships and other vessels." *Provisional protection only.*

HAMER.
31st March 1863.

832. HENRY HAMER, of Kender Street, Old Kent Road, in the County of Surrey, for an invention for—"Improvements in tanning and in apparatus employed therein." *Letters Patent sealed.*

DUNLOP.
31st March 1863.

833. JOHN MACMILLAN DUNLOP, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for ginning cotton." *Letters Patent sealed.*

GRIMSHAW.
1st April 1863.

834. JOHN SMALLEY GRIMSHAW, of Huncoat, near Accrington, in the County of Lancaster, Spinner and Manufacturer, for an invention for—"Improvements in carding-engines." *Provisional protection only.*

HINDLE.
CALVERT.
THORNTON.
1st April 1863.

835. JAMES HINDLE, of Sabden, Calico Printer, WILLIAM FIELDING CALVERT, of Enfield, Cotton Spinner, and EMANUEL THORNTON, of Padiham, Manager, all in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

ROWLAND.
1st April 1863.

836. ISAAC ROWLAND, of Salford, in the County of Lancaster, Committee Clerk to the Corporation of Salford, for an invention for—"An improved mileage apparatus for measuring and registering the distances public vehicles or private carriages travel." *Letters Patent sealed.*

BRAY.
1st April 1863.

837. JOSEPH BRAY, of Stretford, in the County of Lancaster, Plumber, Painter and Glazier, for an invention for—"Improvements in the construction of omnibuses, railway carriages and other vehicles." *Letters Patent sealed.*

HENRY.
1st April 1863.

838. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved method of lubricating."—*A communication to him from abroad by Edwin P. Quadling, of Cape Town, South Africa.* *Letters Patent sealed.*

CLARK.
1st April 1863.

839. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in preventing fermentation in alcoholic and other liquids while drawing them from their containing vessels, and in apparatus for the same."—*A communication to him from abroad by Charles Pierre Laurens, Professor of Mathematics, Adolphe Peret and François de Trégomain, all of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

WEST.
1st April 1863.

840. WALTER WEST, of Euston Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in working railway signals." *Letters Patent sealed.*

MITCHELL.
1st April 1863.

841. WILLIAM MITCHELL, of Carlton Hill East, St. John's Wood, in the County of Middlesex, Gentleman, for an invention for—"An improved process for coating iron."—*A communication to him from abroad by James Mitchell, at present residing in New York, United States of America.* *Letters Patent sealed.*

BOUSFIELD.
1st April 1863.

842. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in steam-boilers."—*A communication to him from abroad by Edward Dickerson, a person resident at New York, in the United States of America.* *Letters Patent sealed.*

WILSON.
1st April 1863.

843. EDWARD BROWN WILSON, of 5, Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the manufacture of iron and steel and other metals, and in the apparatus employed therein." *Provisional protection only.*

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GAVIN.
1st April 1863.

844. ROBERT GAVIN, of Edinburgh, in the County of Mid-Lothian, North Britain, Wine Merchant, for an invention for—"Improvements in the preservation of perishable liquids during the withdrawal or consumption thereof." *Provisional protection only.*

PHILLIPS.
2nd April 1863.

845. WILLIAM HENRY PHILLIPS, of Nunhead, in the County of Surrey, Engineer, for an invention for—"Improvements in means or apparatus for cleaning the bottoms of ships or other floating vessels." *Letters Patent sealed.*

LAW.
INGLIS.
2nd April 1863.

846. JOHN WARREN LAW, and JOHN INGLIS, of Glasgow, in the County of Lanark, North Britain, Ironfounders, for an invention for—"Improvements in making moulds for casting and in apparatus connected therewith." *Letters Patent sealed.*

CLARKE.
2nd April 1863.

847. EDWIN FRANCIS CLARKE, of Holmer Road, Widemarsh, in the Parish of Holmer, and County of Hereford, for an invention for—"Improvements in the means of fastening rails for railways." *Letters Patent sealed.*

SUTHERLAND.
2nd April 1863.

848. DOUGLAS SYMONDS SUTHERLAND, of 34, Great George Street, Westminster, Civil Engineer, for an invention for—"Improvements in protecting vessels of war and fortifications from the effects of projectiles." *Letters Patent sealed.*

CASSELL.
2nd April 1863.

849. JOHN CASSELL, of La Belle Sauvage Yard, in the City of London, Publisher, for an invention for—"Improvements in stills for the distillation of petroleum and other heavy oils." *Letters Patent sealed.*

PÔTEL.
2nd April 1863.

850. JEROME JEAN PÔTEL, of St. Quentin, in the Empire of France, Engineer, for an invention for—"Improvements in furnaces and fire-places having for object the consumption or prevention of smoke." *Letters Patent sealed.*

JONES.
2nd April 1863.

851. WILLIAM JONES, of Liverpool, in the County of Lancaster, Boiler Maker and Iron Ship Builder, for an invention for—"Improvements in the construction of ships or vessels, part of which improvements are also applicable for constructing buildings and for various other purposes in which rolled iron is employed." *Provisional protection only.*

COX.
2nd April 1863.

852. GEORGE ADDISON COX, of Lochee, Dundee, in the County of Forfar, North Britain, Jute and Flax Spinner and Power Loom Linen Manufacturer, for an invention for—"Improvements in the treatment or preparation and manufacture of jute, hemp, flax and other fibrous or textile materials." *Letters Patent sealed.*

PRICE.
2nd April 1863.

853. ASTLEY PASTON PRICE, of 47, Lincoln's Inn Fields, in the County of Middlesex, Chemist, for an invention for—"Improvements in apparatus employed in the fusion, manufacture, production and refining of metals." *Letters Patent sealed.*

SEITHEN.
2nd April 1863.

854. ANTON BRUNO SEITHEN, of 5, Mansfield Place, Kentish Town, London, in the County of Middlesex, for an invention for—"Improvements in casings, covers or wrappers for bottles, jars and other articles." *Letters Patent sealed.*

STEWART.
4th April 1863.

855. ALEXANDER STEWART, of Helensburgh, in the County of Dumbarton, North Britain, Saddler, for an invention for—"Improvements in saddles." *Provisional protection only.*

BLAIN.
4th April 1863.

856. JAMES BLAIN, of the City of Manchester, in the County of Lancaster, Commercial Traveller, for an invention for—"Improvements in the finish of threads and yarns." *Letters Patent sealed.*

HANREZ.
4th April 1863.

857. PROSPER HANREZ, Engineer, of Marchiennes au Pont, in the Kingdom of Belgium, for an invention for—"Improved machinery or apparatus for drying coal, grain and other substances." *Letters Patent sealed.*

SILVESTER.
4th April 1863.

858. JOHN SILVESTER, of the firm of George Salter and Company, of West Bromwich, in the County of Stafford, Manufacturers, for an invention for—"Improvements in attaching guards to pressure gauges." *Provisional protection only.*

PERKIN.
4th April 1863.

859. WILLIAM HENRY PERKIN, of Seymour Villa, Sudbury, in the County of Middlesex, for an invention for—"Improvements in the manufacture of red and orange coloring matters." *Provisional protection only.*

GEDGE.
4th April 1863.

860. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for bolting flour."—*A communication to him from abroad by Jacques Chiron, André Chiron and Pierre Faure, of Paris, France.* *Provisional protection only.*

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GIMSON. 4th April 1863.

861. JOSIAH GIMSON, of the Town and County of Leicester, Engineer, for an invention for—"Improvements in the means of actuating shuttles in looms for weaving narrow fabrics." *Provisional protection only.*

NEWTON. 4th April 1863.

862. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of pressure gauge."—*A communication to him from abroad by Philip Justice, of New York City, United States of America. Provisional protection only.*

SPENCE. 4th April 1863.

863. PETER SPENCE, of Newton Heath, near Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of sulphuric acid and sulphate of iron. *Provisional protection only.*

BAKEWELL. 6th April 1863.

864. FREDERICK COLLIER BAKEWELL, of No. 6, Haverstock Terrace, Hampstead, in the County of Middlesex, for an invention for—"Improvements in wicks for lamps."—*A communication to him from abroad by Joseph Hoys Connelly, of Wheeling, in the State of Virginia, North America.* *Letters Patent sealed.*

COOPER. 6th April 1863.

865. BENJAMIN COOPER, of Frome, in the County of Somerset, Manufacturer, for an invention for—"Improved apparatus for feeding scribbling or carding-engines." *Letters Patent sealed.*

BURROW. 6th April 1863.

866. TAYLOR BURROW, of Albert Place, Brighouse, near Normanton, in the County of York, Silk Spinner, for an invention for—"Improvements in and machinery for combing or dressing silk, flax, wool, hemp, china grass or other fibrous materials." *Provisional protection only.*

GEDGE. 6th April 1863.

867. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in aërial machines."—*A communication to him from abroad by Pierre Jacques Carmien, of Luze, France.* *Provisional protection only.*

HENRY. 6th April 1863.

868. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in probes, catheters and similar surgical instruments."—*A communication to him from abroad by Bernard Saurel, of 33, Boulevart Saint Martin, Paris, France.* *Provisional protection only.*

RAILTON. BOOTH. 6th April 1863.

869. JOHN RAILTON, of Blackburn, in the County of Lancaster, Iron Founder, and HENRY BOOTH, of the same place, Manager, for an invention for—"Improvements in machinery for carding cotton and other fibrous substances." *Provisional protection only.*

BURWIN. 6th April 1863.

870. JOHN BURWIN, of the firm of Thomas Burwin and Sons, of Keighley, in the County of York, Shuttle and Picker Manufacturers, for an invention for—"Improvements in pickers and in the means or apparatus employed in the manufacture thereof." *Letters Patent sealed.*

HUGHES. 6th April 1863.

871. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in machinery or apparatus for manufacturing the ornamental tips of parasols, umbrellas and similar articles."—*A communication to him from abroad by Leon Sestier, of Lyons, in the Empire of France.* *Provisional protection only.*

SWINBURNE. STANLEY. 7th April 1863.

872. JOHN SWINBURNE, of Alfred Town, Ashford, Kent, and JOHN STANLEY, of Whitechapel Road, London, for an invention for—"Improvements in steam-engines and generators." *Letters Patent sealed.*

GILBEE. 7th April 1863.

873. HENRY GILBEE, of No. 4, South Street, Finsbury, London, for an invention for—"A new composition for dressing and preparing silk, cotton and woollen tissues and fibres, and also mixtures of the same."—*A communication to him from abroad by Jacques Matheron, of Lyons, France, Manufacturer.* *Provisional protection only.*

BAMLETT. 7th April 1863.

874. ADAM CARLISLE BAMLETT, of Ripon, in the County of York, Agricultural Engineer, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

MACINTYRE. 7th April 1863.

875. JAMES MACINTYRE, of Burslem, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of knobs and other articles in china and earthenware." *Letters Patent sealed.*

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JOHNSON. 7th April 1863.

876. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus for drying grain, applicable also to the manufacture of malt."—*A communication to him from abroad by George Henry Fourdrinier, of the Village of Lyn, in the Province of Canada, Gentleman.* *Provisional protection only.*

JOHNSON. 7th April 1863.

877. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in polishing precious and other hard stones, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Victor Emanuel Tamisier, of Paris, in the Empire of France.* *Provisional protection only.*

BROOMAN. 7th April 1863.

878. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of baryta and its derivatives, in obtaining by-products, and in revivifying or recovering certain agents employed in such manufacture."—*A communication to him from abroad by Julien Gabriel Lelong Burnet, of Paris, France.* *Letters Patent sealed.*

BROOMAN. 7th April 1863.

879. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in reproducing or obtaining fac-similes of the veins, pores, knots and figures of wood, upon paper and other surfaces."—*A communication to him from abroad by François Magny and Alexandre Cottais, both of Paris, France.* *Letters Patent sealed.*

HOWARD. BOUSFIELD. PINNEY. 7th April 1863.

880. JAMES HOWARD, Engineer, EDWARD TENNEY BOUSFIELD, Engineer, and JOHN PINNEY, Engineer, all of Bedford, in the County of Bedford, for an invention for—"Improvements in steam-engines and in the means of applying the same to the tilling of land, also in apparatus to be used with such engines in the tilling of land." *Letters Patent sealed.*

NEWTON. 7th April 1863.

881. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in projectiles for ordnance and in fuses therefor."—*A communication to him from abroad by Isaac Pettingill Tice, of New York, in the United States of America.* *Letters Patent sealed.*

HILL. HILL. 8th April 1863.

882. GEORGE HILL, and WILLIAM RIDINGS HILL, both of Bolton, in the County of Lancaster, Boiler Makers, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

SIMPSON. 8th April 1863.

883. WILLIAM SIMPSON, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in insulating the magnetic needle or needles in compasses." *Provisional protection only.*

MOSHEIMER. 8th April 1863.

884. JOSEPH MOSHEIMER, of Dolgelly, in the County of Merioneth, Gentleman, for an invention for—"Certain improvements in machinery or apparatus for crushing, grinding and dressing metallic ores, quartz and other similar substances." *Letters Patent sealed.*

BROWN. 8th April 1863.

885. JOHN NURTHALL BROWN, of Handsworth, in the County of Stafford, Gentleman, for an invention for—"Improvements in securing or connecting the bearing springs of railway carriages and wagons to the axle boxes of the said carriages and wagons." *Letters Patent sealed.*

GRAY. 8th April 1863

886. THOMAS GRAY, of Lower Mitcham, in the County of Surrey, Bleacher, for an invention for—"Improvements in preparing and bleaching jute and other vegetable fibres, for spinning and other purposes." *Letters Patent sealed.*

HARRIS. 8th April 1863.

887. JOHN REEVES HARRIS, of Hawley Road, Kentish Town, in the County of Middlesex, House Decorator, for an invention for—"Improvements in propelling vessels." *Provisional protection only.*

GEDGE. 8th April 1863.

888. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for propelling and navigating small craft."—*A communication to him from abroad by Hilaire André Levallois, of l'Isle Adam, France.* *Provisional protection only.*

MITCHEL. 8th April 1863.

889. WILLIAM HASLETT MITCHEL, of Hampstead, in the County of Middlesex, Gentleman, for an invention for—"An improved construction of barometer." *Letters Patent sealed.*

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NORTON. 8th April 1863.

890. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in machinery for washing and drying wool and other fibres and rags, also in tentering, stretching and drying fabrics." *Letters Patent sealed.*

KINDER. 8th April 1863.

891. ARTHUR KINDER, of 20, Cannon Street, in the City of London, Engineer, for an invention for—"Improvements in coating or covering lead or alloys of lead with tin or alloys of tin, and in the apparatus employed therein." *Letters Patent sealed.*

FOX. 9th April 1863.

892. HOWARD BUSBY FOX, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in dish covers." *Provisional protection only.*

COOKE. 9th April 1863.

893. DAVID JAMES COOKE, of the City of Manchester, in the County of Lancaster, Dyer and Finisher, for an invention for—"Improved compounds or compositions for sizing, stiffening and coloring yarns and textile fabrics." *Provisional protection only.*

HEATH. 9th April 1863.

894. THOMAS THEODORE HEATH, of Liverpool, in the County of Lancaster, Artist, for an invention for—"The application of glass for ceilings and the like overhead parts of houses and other structures." *Provisional protection only.*

RISSE. 9th April 1863.

895. FRANCIS JOSEPH RISSE, of Carlisle, in the County of Cumberland, Engineer, for an invention for—"An improved haft or handle for holding tools or instruments of various sizes." *Letters Patent sealed.*

SPENCER. 9th April 1863.

896. GEORGE SPENCER, of No. 2, Lausanne Villas, Queen's Road, Peckham, Surrey, Civil Engineer, for an invention for—"Improvements in preventing incrustation in steam-engine boilers." *Letters Patent sealed.*

HETT. BASSET. 9th April 1863.

897. ALEXANDER HETT, of the City of London, Doctor of Medicine, and FREDERICK WILLIAM BASSET, of Camberwell, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in preventing the fouling of ships' bottoms and in cleansing the same when fouled." *Letters Patent sealed.*

RADLEY. MCCOLL. 9th April 1863.

898. JAMES RADLEY, junior, of Pocket Nook Smelting Works, in Saint Helen's, in the County of Lancaster, Smelter of Ores, and DUNCAN MCCOLL, of the same place, Manager to the said James Radley, for an invention for—"Improvements in preventing the escape of fumes and matters from furnaces." *Provisional protection* NOT *granted.*

PENSON. 9th April 1863.

899. RICHARD KYRKE PENSON, of Ferryside, Carmarthenshire, for an invention for—"Improvements in apparatus used for warming railway carriages."—*A communication to him from abroad by Adrien Delcambre, a person resident at Rue de Bourgoyne, Paris, in the Empire of France.* *Letters Patent sealed.*

BURTON. 9th April 1863.

900. JAMES RYDER BURTON, K.H., a Vice Admiral in Her Majesty's Navy, of 15, Park Square, Regent's Park, in the County of Middlesex, for an invention for—"A new method of and apparatus for cleansing ships' bottoms." *Provisional protection only.*

FERRAND. 9th April 1863.

901. GEORGE FERRAND, of Woolley Bridge, in the County of Derby, Tin Plate Worker, for an invention for—"Certain improvements in apparatus for supplying oil or other liquid lubricant to frictional surfaces." *Provisional protection only.*

NEWTON. 9th April 1863.

902. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of offensive weapon."—*A communication to him from abroad by James Cameron Campbell, of New York City, in the United States of America.* *Letters Patent sealed.*

LOW. 9th April 1863.

903. GEORGE LOW, of Newark-on-Trent, in the County of Nottingham, Engineer, for an invention for—"Improved machinery for boring rocks and other hard substances." *Letters Patent sealed.*

NEWTON. 9th April 1863.

904. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in stirrups and in the mode of attaching the same to saddles."—*A communication to him from abroad by Jacques Eugene Armengaud, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

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COLOMB. 10th April 1863.

905. GUSTAVE COLOMB, of Aigle, Canton de Vaud, Switzerland, Civil Engineer, for an invention for—"A process of manufacturing factitious blocks of wood of diversified shades and hues, proper for veneering and other purposes."
Letters Patent sealed.

COUPERIE. 10th April 1863.

906. SAINTE AURE COUPERIE, of Bordeaux, in the Empire of France, Gentleman, for an invention for—"A semicircular metallic slide, whereby the pole bolt is effectually suppressed, and which can be adapted to every four-wheeled vehicle."
Complete specification; Letters Patent sealed.

BALDWIN. 10th April 1863.

907. THOMAS BALDWIN, of Bury, in the County of Lancaster, Engineer, for an invention for—"Improvements in superheating steam and in apparatus connected therewith." *Letters Patent sealed.*

SHELMERDINE. DRANSFIELD. 10th April 1863.

908. SAMUEL SHELMERDINE, of Stockport, in the County of Chester, and JOHN DRANSFIELD, of Oldham, in the County of Lancaster, Hat Manufacturers, for an invention for—"Improvements in the ornamentation by printing of felt hats."
Letters Patent sealed.

SPICER. 10th April 1863.

909. HENRY REVELL SPICER, of No. 3, Clement's Lane, Lombard Street, in the City of London, Ship Broker, for an invention for—"Improvements in boxes or cases for the enclosure and preservation of human remains." *Provisional protection only.*

SMITH. 10th April 1863.

910. ROBERT SMITH, of No. 10, Northampton Terrace, Crompton Road, Islington, in the County of Middlesex, Gentleman, for an invention for—"An improved medicated oil for the preservation of metal, wood or stone." *Letters Patent sealed.*

WIGHTMAN. DENING. 10th April 1863.

911. JOHN WIGHTMAN, and CHARLES DENING, both of Chard, in the County of Somerset, Agricultural Implement Makers, for an invention for—"Improvements in horse rakes." *Provisional protection only.*

GIMSON. 10th April 1863.

912. JOSIAH GIMSON, of the Town and County of Leicester, Engineer, for an invention for—"Improvements in screw cutting lathes."
Provisional protection only.

RIPLEY. 10th April 1863.

913. HENRY WILLIAM RIPLEY, of Montpellier Lawn, Cheltenham, for an invention for—"Improvements in machinery for preparing and printing wool and other fibres."—*A communication to him from abroad by Stanislas Vigoureux, a person resident at Reims, in the Empire of France.* *Letters Patent sealed.*

CAUDWELL. 10th April 1863.

914. HENRY CAUDWELL, of Oatlands House, Shillingford, in the County of Oxford, Gentleman, for an invention for—"Improvements in the construction of vessels of war, part of which improvements is applicable to fortifications."
Letters Patent sealed.

VERSMANN. 11th April 1863.

915. FREDERICK VERSMANN, of 7, Bury Court, Saint Mary Axe, in the City of London, Consulting and Analytical Chemist, for an invention for—"Improvements in moulding machines." *Provisional protection only.*

LOCKWOOD. 11th April 1863.

916. JOHN LOCKWOOD, of Batley, in the County of York, Rag Merchant, for an invention for—"Improvements in steam-boiler and other furnaces."
Letters Patent sealed.

MYLREA. 11th April 1863.

917. DANIEL MYLREA, of Church, near Accrington, in the County of Lancaster, Millwright and Engineer, for an invention for—"Improvements in fire-bars or furnace grids." *Letters Patent sealed.*

SAMUEL. 11th April 1863.

918. WALTER SAMUEL, of Liverpool, in the County of Lancaster, Watch Manufacturer, for an invention for—"Improvements in or applicable to railway carriages to mitigate or lessen the effects of collisions to passengers."
Provisional protection only.

FARRAR. 11th April 1863.

919. JAMES FARRAR, of Halifax, in the County of York, Machine Maker, for an invention for—"Improvements in machinery or apparatus for twisting or doubling yarns of wool or other fibrous substances." *Provisional protection only.*

CLARK. 11th April 1863.

920. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in separating ores from their gangues and in apparatus for the same."—*A communication to him from abroad by Louis Napoléon Langlois, of 29, Boulevart St. Martin, Paris, Gentleman.*" *Letters Patent sealed.*

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BALY. 11th April 1863. — **921.** PRICE PRICHARD BALY, of 4, Robert Street, Adelphi, in the County of Middlesex, Civil Engineer, for an invention for—" Improvements in constructing breakwaters, piers, sea walls and other similar structures." *Letters Patent sealed.*

MACLURE. 11th April 1863. — **922.** ALEXANDER FORTAY MACLURE, of Glasgow, in the County of Lanark, North Britain, Machinist, for an invention for—" Improvements in looms for weaving figured fabrics." *Letters Patent sealed.*

COLLINS. 11th April 1863. — **923.** CHARLES ATKINS COLLINS, of Trowbridge, in the County of Wilts, Gentleman, for an invention for—" An improved method and apparatus for loading carts and waggons with hay, straw and other similar products." *Letters Patent sealed.*

RAMSBOTTOM. 13th April 1863. — **924.** JOHN RAMSBOTTOM, of Crewe, in the County of Chester, Engineer, for an invention for—" Improvements in machinery for hammering, rolling and shaping metals." *Letters Patent sealed.*

GILL. 13th April 1863. — **925.** JOHN GILL, of Edinburgh, in the County of Mid-Lothian, North Britain, for an invention for—" Improvements in printing machinery." *Letters Patent sealed.*

ROLFE. 13th April 1863. — **926.** ALFRED ROLFE, of Amwell Street, Pentonville, in the County of Middlesex, Merchant, for an invention for—" Improvements in means or apparatus for propelling carriages on railways, tramways or on common roads." *Provisional protection only.*

LEGGETT. GITTUS. 13th April 1863. — **927.** ROBERT LEGGETT, Engineer, and ROBERT GITTUS, Farmer, both of Mildenhall, in the County of Suffolk, for an invention for—" Improvements in the construction of machinery or apparatus for cutting chaff and other agricultural produce." *Letters Patent sealed.*

LARK. 13th April 1863. — **928.** JAMES LARK, of White Lion Wharf, Bankside, Southwark, in the County of Surrey, for an invention for—" Improvements in the manufacture of artificial fuel and cement." *Provisional protection only.*

REEVES. 13th April 1863. — **929.** ROBERT REEVES, of Bratton, in the County of Wilts, for an invention for—" Improvements in the manufacture of liquid manure drills." *Letters Patent sealed.*

NEWTON. 13th April 1863. — **930.** ROBERT NEWTON, of Leeds, in the County of York, Machinist, for an invention for—" Improvements in machinery for separating and straightening the fibres of silk waste and other fibrous substances." *Letters Patent sealed.*

MYERS. 13th April 1863. — **931.** MICHAEL MYERS, of Wigmore Street, Cavendish Square, in the County of Middlesex, for an invention for—" Improvements in the construction of trunks, portmanteaus and boxes." *Letters Patent sealed.*

MALLINSON. WILLIAMS. 13th April 1863. — **932.** THOMAS MALLINSON, of the firm of Fleming, Mallinson and Co., of Globe Works, in the City of Manchester, and County of Lancaster, Machine Makers, and PETER WILLIAMS, of the same place, Machinist, for an invention for—" Improvements in machinery for opening, cleaning, carding and grinding or sharpening cards used in preparing cotton and other fibrous materials." *Letters Patent sealed.*

NASMITH. THORNTON. 14th April 1863. — **933.** JOHN NASMITH, of the City of Manchester, Foreman, and SAMUEL THORNTON, of the same place, Mechanical Draughtsman, for an invention for—" Improvements in machinery for carding cotton and other fibrous substances." *Provisional protection only.*

BERRY. 14th April 1863. — **934.** GEORGE BERRY, of No. 19, Bultesland Street, Hoxton, in the County of Middlesex, Gentleman, for an invention for—" Improvements in locks." *Provisional protection only.*

SMITH. 14th April 1863. — **935.** GEORGE THOMAS SMITH, of Ordsall House, East Retford, in the County of Nottingham, for an invention for—" Improvements in metallic window shutters." *Letters Patent sealed.*

KEATS. KEATS. 14th April 1863. — **936.** WILLIAM KEATS, and JOHN KEATS, both of Street, in the County of Somerset, for an invention for—" Improvements in the manufacture of boots, shoes or other coverings for the feet." *Letters Patent sealed.*

COMBE. SMALPAGE. 14th April 1863. — **937.** JOHN COMBE, of Leeds, Engineer, and JOHN HENRY SMALPAGE, also of Leeds, Woollen Draper and Tailor, for an invention for—" Improvements in the action and arrangement of machines for winding cops, in the construction and arrangement of banks for holding cops for warping purposes, in the formation of shuttles for receiving cops, and for apparatus for packing and securing cops in shuttles, one part of which improvements, consisting of a spring clutch, is applicable to machines in general." *Letters Patent sealed.*

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KEATS. CLARK. 14th April 1863.

938. JOHN KEATS, and WILLIAM STEPHENS CLARK, of Street, in the County of Somerset, for an invention for—"Improvements in sewing machines."
Letters Patent sealed.

TRAPNELL. 14th April 1863.

939. HENRY TRAPNELL, of the City of Bristol, Mahogany Merchant, for an invention for—"Improvements in vent pegs." *Provisional protection only.*

BROOMAN. 14th April 1863.

940. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in hardening and colouring gypseous limestone and sand and calcareous stones."—*A communication to him from abroad by Pascal Nicolas Balthazar Fioravanti, of Paris, France.*
Letters Patent sealed.

BROOMAN. 14th April 1863.

941. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in lamps for burning light and heavy mineral and vegetable oils."—*A communication to him from abroad by Etienne Laporte, of Paris, France.* *Letters Patent sealed.*

SMITH. 14th April 1863.

942. JOHN SMITH, of Edward Street, Wentworth Road, Bow Road, East, in the County of Middlesex, Engineer, for an invention for—"Improvements in furnaces and boilers for the generation of steam, partly applicable also for other purposes."
Letters Patent sealed.

LEACH. 15th April 1863.

943. JAMES LEACH, of Cheadle, in the County of Chester, Commercial Clerk, for an invention for—"An improved machine or apparatus for washing, squeezing, mangling and churning." *Letters Patent sealed.*

COLQUHOUN. FERRIS. 15th April 1863.

944. EWING PYE COLQUHOUN, and JOHN PARDOE FERRIS, both of No. 1, Lawrence Pountney Hill, in the City of London, for an invention for—"Improvements in fire bars for the furnaces of steam-boilers and fire grates."
Provisional protection only.

GRAY. 15th April 1863.

945. THOMAS GRAY, of Lower Mitcham, in the County of Surrey, Bleacher, for an invention for—"Improvements in preparing and bleaching flax, hemp and other vegetable fibres, by which a brilliant lustre is imparted to those substances and the fibres are separated." *Letters Patent sealed.*

CLARK. 15th April 1863.

946. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for the transport of goods."—*A communication to him from abroad by Paulin Gay, of 29, Boulevart St. Martin, Paris, Contractor for Public Works.*
Letters Patent sealed; no specification filed.

BONNEVILLE. 15th April 1863.

947. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in the construction of gas burners."—*A communication from Theodore Berents, Manufacturer, a person residing at Maestricth, in the Kingdom of Belgium.* *Letters Patent sealed.*

MARRIOTT. 15th April 1863.

948. AMBROSE MARRIOTT, of High Street, Higham Ferrers, in the County of Northampton, Engineer, for an invention for—"Improvements in boilers for heating buildings and in regulators for the same." *Letters Patent sealed.*

SPENCE. 15th April 1863.

949. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of gunpowder."—*A communication to him from abroad by Samuel Ricker, resident in the free City of Frankfort-on-the-Maine.* *Letters Patent sealed.*

EATON. 15th April 1863.

950. HENRY EATON, of the City of Manchester, in the County of Lancaster, Smith and Wheelwright, for an invention for—"Improvements applicable to presses for baling purposes." *Letters Patent sealed.*

MORTON. 15th April 1863.

951. JOHN SANDERSON MORTON, of Northampton, in the County of Northampton, Cabinet Maker, for an invention for—"Improvements in locks."
Provisional protection only.

NEWTON. 15t April 1863.

952. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of blowing apparatus."—*A communication to him from abroad by Joseph Perrigault, of Rue St. Sebastien, Paris, in the Empire of France.*
Letters Patent sealed.

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FLETCHER. 15th April 1863.	**953.** THOMAS BELL ELCOCK FLETCHER, of Birmingham, in the County of Warwick, Doctor of Medicine, for an invention for—"Improvements in apparatus for collecting the solid portions of sewage." *Letters Patent sealed.*
WATTS. 16th April 1863.	**954.** JOHN BURCHLEY WATTS, of Birmingham, in the County of Warwick, Sword Cutler, for an invention for—"An improvement in steel sword hilts." *Provisional protection only.*
MCLAY. 16th April 1863.	**955.** JOHN LAIRD MCLAY, of Liverpool, in the County of Lancaster, Master Mariner, for an invention for—"Improvements applicable to mariners' compasses." *Provisional protection only.*
BAGGS. SIMPSON. 16th April 1863.	**956.** ISHAM BAGGS, of Cambridge Terrace, in the County of Middlesex, Practical Chemist, and WILLIAM SIMPSON, of Tovill Upper Mills, in the County of Kent, Manufacturer, for an invention for—"Improvements in purifying and treating coal gas, sulphuretted hydrogen, and other gases containing sulphuretted hydrogen, and in obtaining sulphur, sulphuric and other acids in such treatment." *Letters Patent sealed.*
FERRETT. 16th April 1863.	**957.** CHARLES FERRETT, of Clifton Place, Stapleton Road, Bristol, Saddler and Harness Maker, for an invention for—"Improvements in preventing incrustation in steam-boilers." *Letters Patent sealed.*
MOULTON. 16th April 1863.	**958.** STEPHEN MOULTON, of Bradford, in the County of Wilts, India-rubber Manufacturer, for an invention for—"Improvements in apparatus or means for lessening the recoil of cannon." *Provisional protection only.*
OLDFIELD. 16th April 1863.	**959.** WILLIAM OLDFIELD, of Noble Street, Saint Luke's, in the County of Middlesex, Writing and Dressing Case Manufacturer, for an invention for—"Improvements in the construction of locks applicable to despatch and other boxes, writing and dressing cases or other similar receptacles." *Letters Patent sealed.*
SAMUELSON. 16th April 1863.	**960.** ALEXANDER SAMUELSON, of 28, Cornhill, in the City of London, Engineer and Iron Ship Builder, for an invention for—"Improvements in the construction and arrangement of machinery and apparatus for the manufacture of oil." *Letters Patent sealed.*
CLARKE. 16th April 1863.	**961.** THOMAS ALFRED WILLIAM CLARKE, of Leicester, in the County of Leicester, Machine Maker, for an invention for—"An improved construction of shuttle driver and apparatus for working the same." *Provisional protection only.*
DE MASSAS. 16th April 1863.	**962.** FRANÇOIS ANTOINE EDMOND GUIRONNET DE MASSAS, of Hoxton, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in smut machines and in machines for cleansing and peeling grain and seeds." *Provisional protection only.*
KNIGHT. 17th April 1863.	**963.** RICHARD KNIGHT, of Dunkirk, in the Empire of France, Engineer, for an invention for—"Improvements in treating and preparing iron, copper and other wires for telegraphic and other uses, for the purpose of preserving them from corrosion or decay." *Letters Patent sealed.*
RILEY. 17th April 1863.	**964.** SAMUEL RILEY, of Oldham, in the County of Lancaster, Agent, for an invention for—"Improvements in the manufacture or preparation of cocoa and chocolate." *Provisional protection only.*
RICHMOND. RICHMOND. HARLING. 17th April 1863.	**965.** JAMES RICHMOND, of Burnley, in the County of Lancaster, Manufacturer, and THOMAS RICHMOND, and DANIEL HARLING, of the same place, Machinists, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*
GOUCHER. 17th April 1863.	**966.** JOHN GOUCHER, of Worksop, in the County of Nottingham, Ironfounder, Engineer and Machinist, for an invention for—"Improvements in steam-boilers and in regulating the admission of air into the furnaces of steam-boilers." *Letters Patent sealed.*
CLAPHAM. 17th April 1863.	**967.** ROBERT CALVERT CLAPHAM, of Walker, in the County of Northumberland, Analytical Chemist, for an invention for—"Treating the waste liquors from bleaching powder stills in order to obtain hydrochloric acid and other products therefrom." *Letters Patent sealed.*

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LAWSON. DARLOW. 17th April 1863.

968. ROBERT HENRY LAWSON, of Victoria Terrace, Victoria Docks, in the County of Essex, and WILLIAM DARLOW, of Victoria Place, North Woolwich Road, in the County of Essex, for an invention for—"Improvements in apparatus or means for obtaining motive-power." *Provisional protection only.*

MASSINGHAM. 17th April 1863.

969. WILLIAM MASSINGHAM, of Boston, in the County of Lincoln, Brewer, for an invention for—"Improvements in apparatus for cooling liquids." *Provisional protection only.*

TURNER. 17th April 1863.

970. CORNELIUS TURNER, of Airedale Felt Mills, Hunslet, in the Parish of Leeds, in the County of York, for an invention for—"Improvements in the manufacture of felted fabrics." *Letters Patent sealed.*

WEBBER. 17th April 1863.

971. BERNARD JAMES WEBBER, of Newton Abbott, in the County of Devon, Engineer and Agricultural Implement Manufacturer, for an invention for—"Improvements in apparatus for separating corn from the ears and for combing straw." *Letters Patent sealed*

SIEMENS. SIEMENS. 18th April 1863.

972. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, and FREDERICK SIEMENS, of Birmingham, in the County of Warwick, for an invention for—"Improvements in furnaces which are principally applicable to the smelting of iron." *Letters Patent sealed.*

MACDONALD. 18th April 1863.

973. WILLIAM STEVENSON MACDONALD, of the City of Manchester, Practical Chemist, for an invention for—"Improvements in apparatus for drying animal, vegetable and mineral substances." *Provisional protection only.*

WESTON. 18th April 1863.

974. THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in ratchet levers." *Letters Patent sealed.*

BURDEN. 18th April 1863

975. WILLIAM BENONI BURDEN, of Malvern, in the County of Worcester, for an invention for—"Improvements in wheels and axles applicable to locomotives, carriages and paddle wheels." *Provisional protection only.*

BUCHHOLZ. 18th April 1863.

976. GUSTAV ADOLPH BUCHHOLZ, of Montague Place, Clapham Road, in the County of Surrey, Engineer, for an invention for—"Improvements in apparatus for hulling grain and for reducing granular substances." *Letters Patent sealed.*

HUNT. 18th April 1863.

977. THOMAS HUNT, of Banbury, in the County of Oxford, Brewer, for an invention for—"Improved apparatus for obtaining motive-power." *Provisional protection only.*

ROWELL. HOLT. 20th April 1863.

978. PHILIP GEORGE ROWELL, of 17, Castle Square, Brighton, Sussex, and HENRY HOLT, of 14, Red Cross Street, Brighton, Sussex, for an invention for—"A better and more economical mode of securing the bands of locomotive engine and tender springs, also a new method of applying the same." *Letters Patent sealed.*

RANDOLPH. ELDER. 20th April 1863.

979. CHARLES RANDOLPH, and JOHN ELDER, of Glasgow, in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements in surface condensers." *Provisional protection only.*

GRAHAM. GRAHAM. GRAHAM. 20th April 1863.

980. GEORGE GRAHAM, WILLIAM GRAHAM, and JOHN GRAHAM, of the firm of Messieurs Graham and Sons, of Burnley, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in machinery for folding or plaiting fabrics." *Provisional protection only.*

BLANC. 20th April 1863.

981. CLAUDE BLANC, Civil Engineer, of 8, Rue Chapon, Paris (France), for an invention for—"Improvements in apparatus for the purpose of using air and steam as motive-power." *Letters Patent sealed.*

ROBEY. 20th April 1863.

982. JAMES ROBEY, of Newcastle-under-Lyme, in the County of Stafford, for an invention for—"Improvements in apparatus for separating fluids from more solid matters mixed or combined therewith." *Provisional protection only.*

NEWTON. 20th April 1863.

983. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in lamps."—*A communication to him from abroad by Robert Cornelius, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

HUGHES. 20th April 1863.

984. EBENEZER WILLIAM HUGHES, of No. 28, Great George Street, Westminster, Civil Engineer, for an invention for—"Improvements in turn tables, turn bridges and slips." *Letters Patent sealed.*

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FORD. RIGG. 21st April 1863.

985. ALFRED FORD, of Stewart's Buildings, Battersea Fields, in the Co. of Surrey, Gentleman, and RICHARD RIGG, of No. 3, Great Winchester Street, in the City of London, Gentleman, for an invention for—"An improved method of reforming and re-using old or waste vulcanized india-rubber." *Letters Patent sealed.*

RAFTER. 21st April 1863.

986. HENRY RAFTER, of No. 5, Barr's Hill Terrace, Coventry, in the County of Warwick, Artist, for an invention for—"An improved process for obtaining printing surfaces." *Letters Patent sealed.*

HEAP. 21st April 1863.

987. JOSHUA HEAP, of Ashton-under-Lyne, in the County of Lancaster, Tool Maker, for an invention for—"Improvements in adjustable wrenches for nuts, pipes and pins." *Provisional protection only.*

SIMPSON. 21st April 1863.

988. EDWIN LINDSEY SIMPSON, of Bridgeport, in the County of Fairfield, and State of Connecticut, United States of America, for an invention for—"An improvement in waterproof compounds and in fabrics prepared therewith." *Letters Patent sealed.*

LLOYD. 21st April 1863.

989. NICHOLAS PHILIP COMINS LLOYD, residing at No. 10, Providence Row, Finsbury, in the City of London, for an invention for—"An improved atmospheric engine applicable to purposes to which steam, horse, wind and water power is employed. *Provisional protection* NOT *granted.*

RUNKEL. 21st April 1863.

990. MARK RUNKEL, of Centre Street, New York, United States of America, and Hotel Sablonière, Leicester Square, in the County of Middlesex, Engineer, for an invention for—"Improvements in marine steam-engine governors."—*A communication to him from abroad by Henry Behrens, of Chatham Street, New York, in the United States of America, Engineer.* *Letters Patent sealed.*

NOTTINGHAM. 21st April 1863.

991. JOHN WILLIAM NOTTINGHAM, of Clayton Place, Kennington Road, in the County of Surrey, Artist, for an invention for—"Improvements in two-wheeled vehicles." *Letters Patent sealed; no specification filed.*

YEADON. YEADON. YEADON. YEADON. 21st April 1863.

992. HUDSON YEADON, EDWIN YEADON, and SAMUEL YEADON, all of Stockport, in the County of Chester, and JOHN YEADON, of Leeds, in the County of York, Reedmakers, for an invention for—"Improved healds for weaving." *Letters Patent sealed.*

DONALD. 21st April 1863.

993. HUGH DONALD, of the firm of Craig and Donald, of Johnstone, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in machinery or apparatus for bending or straightening metal plates." *Letters Patent sealed.*

NEWTON. 21st April 1863.

994. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in wrenches."—*A communication to him from abroad by Louis Schwartzkopff, of Berlin, in the Kingdom of Prussia.* *Letters Patent sealed.*

CAMBRIDGE. 21st April 1863.

995. WILLIAM COLBORNE CAMBRIDGE, of Bristol, Agricultural Implement Manufacturer, for an invention for—"Improvements in the construction of harrows." *Letters Patent sealed.*

CAMPION. WILSON. 21st April 1863.

996. WILLIAM CAMPION, and GEORGE WILSON, of the Market Place, near Sneinton, in the Town and County of the Town of Nottingham, General Mechanists, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of looped fabrics." *Letters Patent sealed.*

RYAN. DANIEL. 21st April 1863.

997. WILLIAM RYAN, of 17, Fishamble Street, in the City of Dublin, Engineer and Machinist, and WILLIAM DANIEL, of 55, Mary Street, in the same City, Ironmonger and Gas Engineer, for an invention for—"Improvements in apparatus for transmitting, equalizing and registering human power." *Letters Patent sealed.*

BRYANT. 22nd April 1863.

998. FREDERICK EDWARD BRYANT, of Alfred Street, Bedford Square, in the County of Middlesex, Gentleman, for an invention for—"Improved apparatus for ascertaining the temperature of steam and its power of tension."—*A communication to him from abroad by Hans Ambrosseus, of Konigsberg, Prussia.* *Letters Patent sealed.*

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SETTLE. 22nd April 1863.

999. THOMAS SETTLE, of Bolton, in the County of Lancaster, Spindle and Flyer Maker, for an invention for—"Certain improvements in 'flyers' to be employed in roving, slubbing and spinning cotton and other fibrous substances."
Letters Patent sealed.

DURAND. 22nd April 1863.

1000. FRANÇOIS DURAND, of Paris, France, Mechanical Engineer, for an invention for—"Improvements in moulding articles of china or other clay or of other plastic materials."
Letters Patent sealed.

GRACE. 22nd April 1863.

1001. THEODORE GRACE, of the City and County of Bristol, Agricultural Engineer, for an invention for—"Improvements in reaping and mowing machines, part of which improvement is applicable to other useful purposes."
Provisional protection only.

BARLOW. 22nd April 1863.

1002. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in shoes, boots and other coverings for the feet."—*A communication to him from abroad by Jesse Follett, of Turner, in the County of Androscogin, State of Maine, in the United States of America.*
Provisional protection only.

JEFFS. TURNER. 22nd April 1863.

1003. EDWARD JAMES JEFFS, 1A, St. James' St., Old Steyne, Brighton, in the County of Sussex, Auctioneer and Estate Agent, and THOMAS TURNER, of Stanley Bridge Wharf, King's Road, Chelsea, in the County of Middlesex, Mason and Pavier, for an invention for—"Improvements in the making and constructing of carriage ways."
Provisional protection only.

CLARK. 22nd April 1863.

1004. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the means of obtaining publicity."—*A communication to him from abroad by Louis Jean Delton, of 29, Boulevart St. Martin, Paris, Photographer.*
Provisional protection NOT *granted.*

LEE. DAWSON. 22nd April 1863.

1005. JAMES LEE, Weaving Master, and EDWIN DAWSON, Foreman Mechanic, of Tammerfors, Finland, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

BARBER. 22nd April 1863.

1006. GILL BRIDGES BARBER, of Park Street Boiler Works, Red Bank, in the City of Manchester, and No. 60, Stock Street, Cheetham Hill, Manchester, in the County of Lancaster, Boiler Maker, for an invention for—"Improvements in steam-boilers and apparatus connected therewith."
Letters Patent sealed.

PROFFITT. DUNCAN. 23rd April 1863.

1007. JOHN WILLIAM PROFFITT, Land Agent and Surveyor, of Park Road, Peckham, in the County of Surrey, and WILLIAM LUNDI DUNCAN, Gentleman, of 218, Pembroke Cottages, Caledonian Road, in the County of Middlesex, for an invention for—"An improved mode and apparatus for distributing sand or any other suitable substance or substances on the rails of railways and tramways."
Letters Patent sealed.

WHITLEY. POPE. BURTON. 23rd April 1863.

1008. JOSEPH WHITLEY, JOHN BUCKINGHAM POPE, and JOHN WATSON BURTON, all of Leeds, in the County of York, for an invention for—"Improvements in the manfacture of metals."
Provisional protection only.

RICHARDSON. 23rd April 1863.

1009. ROBERT RICHARDSON, of Great George Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in railway permanent way."
Letters Patent sealed.

NEWTON. 23rd April 1863.

1010. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of repairing worn out files and rendering them again fit for use."—*A communication to him from abroad by Charles Adolphe Clavel, of 45, Rue St. Sebastien, Paris, in the Empire of France.*
Letters Patent sealed.

CLARK. 23rd April 1863.

1011. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of tiles and in apparatus for the same."—*A communication to him from abroad by Pierre François Boulet, of 29, Boulevart St. Martin, Paris, File Manufacturer.*
Letters Patent sealed

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RICHARDSON. STEVENSON. 23rd April 1863.

1012. THOMAS RICHARDSON, of the Town and County of Newcastle-upon-Tyne, Chemist, and JAMES COCHRAN STEVENSON, of the Jarrow Chemical Works, in the County of Durham, Chemical Manufacturer, for an invention for—"Improvements in the manufacture of sulphate of soda." *Letters Patent sealed.*

MCGREGOR. 23rd April 1863.

1013. PETER MCGREGOR, of the City of Manchester, Machine Maker, for an invention for—"Improvements in machinery for spinning and doubling." *Letters Patent sealed.*

CAVANAH. 23rd April 1863.

1014. JOHN CAVANAH, of 21, Parron Street, Paddington, Liverpool, in the County of Lancaster, for an invention for—"An improvement in cricket bats." *Letters Patent sealed.*

DAINES. 24th April 1863.

1015. JOHN BENJAMIN DAINES, of No. 5, Little Argyle Street, West, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the preparation of stone, plaster, compo, iron, wood and such like substances, so as to preserve them from decay." *Letters Patent sealed.*

WILSON. GREY. 24th April 1863.

1016. WILLIAM NEWTON WILSON, of No. 144, High Holborn, in the County of Middlesex, and JAMES GRAHAM GREY, of No. 97, Cheapside, in the City of London, for an invention for—"Improvements in machinery for sewing and stitching." *Letters Patent sealed.*

LAMBERT. 24th April 1863.

1017. JOHN LAMBERT, of Sheffield, in the County of York, Brass Founder, for an invention for—"Improvements in ball cocks." *Provisional protection only.*

SHEPPARD. 24th April 1863.

1018. JOHN SHEPPARD, of Canterbury, in the County of Kent, Conveyancer's Clerk, for an invention for—"Improvements in steam-engines. *Provisional protection only.*

KNOWLES. JACKSON. 24th April 1863.

1019. JOHN KNOWLES, of Bury, in the County of Lancaster, Engineer, and SAMUEL JACKSON, Auctioneer and Valuer, of the same place, for an invention for—"Certain improvements in apparatus for heating water in furnaces, flues and chimneys." *Provisional protection* NOT *granted.*

LAVENDER. 24th April 1863.

1020. ROBERT LAVENDER, of No. 332, Goswell Road, in the Parish of St. Mary, Islington, in the County of Middlesex, Ink Manufacturer, for an invention for—"A new compound to be used as a lubricator. *Complete specification; Letters Patent sealed.*

PASSAVANT. 24th April 1863.

1021. PHILIP PASSAVANT, of Bradford, in the County of York, for an invention for—"Improvements in the manufacture of blue colouring matter, and also of violet colouring matter."—*A communication to him from abroad by Friedrich Beyer, a person resident at Barmen, in the Kingdom of Prussia.* *Provisional protection only.*

CORNES. DAVIS. 24th April 1863.

1022. JOHN CORNES, of Roden Villa, and JOHN COOPE DAVIS, of Cranbrook Park, Gentlemen, both of Ilford, in the County of Essex, for an invention for—"Improvements in lawn-mowing, rolling and collecting machines." *Letters Patent sealed.*

THOMPSON. 24th April 1863.

1023. JAMES THOMPSON, of Bilston, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of barrels for fire-arms and other descriptions of tubes, and in apparatus or machinery to be employed for that purpose." *Letters Patent sealed.*

THOMPSON. 24th April 1863.

1024. JAMES THOMPSON, of Bilston, in the County of Stafford, Manufacturer, for an invention for—"Improvements in machinery for punching metals." *Letters Patent sealed.*

SHAW. 24th April 1863.

1025. WILLIAM ANTHONY SHAW, of the City and State of New York, United States of America, for an invention for—"A mode of lining lead pipe with tin or its alloys." *Letters Patent sealed.*

HINKS. NEWMAN. 24th April 1863.

1026. JAMES HINKS, of Birmingham, in the County of Warwick, Manufacturer, and JAMES NEWMAN, of Birmingham, aforesaid, Manufacturer, for an invention for—"Improvements in the manufacture of buttons." *Provisional protection only.*

JOHNSON. 24th April 1863.

1027. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"A filtering apparatus for treating by pressure oils, syrups and all sorts of liquids susceptible of filtering."—*A communication to him from abroad by Edmund Marquis de Ruffo Bonneval and Joseph Mouren, both of Marseilles, in the Empire of France.* *Letters Patent sealed.*

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POOLEY.
25th April 1863.

1028. CHARLES POOLEY, of the City of Manchester, Cotton Spinner, for an invention for—"Improvements in certain parts of machinery for preparing and spinning cotton and other fibrous substances." *Letters Patent sealed.*

DE BREAŃSKI.
25th April 1863.

1029. LEOPOLD DE BREAŃSKI, of Greenwich, in the County of Kent, for an invention for—"Improved apparatus for fixing drills, which invention is also applicable for fixing apparatus for raising, supporting and suspending weights and for other analogous purposes." *Letters Patent sealed.*

HARRISON.
25th April 1863.

1030. SAMUEL HARRISON, carrying on business at York Street, Sheffield, as a Stereotyper, Typefounder, Printer and Newspaper Proprietor, and at 13, Great Sutton Street, London, as a Stereotyper, and residing at 36, Gell Street, Sheffield, for an invention for—"A new and improved mode of manufacturing type for letter-press printing. *Letters Patent sealed.*

CLARK.
HOPE.
25th April 1863.

1031. ALBERT HENRY CLARK, of Birmingham, in the County of Warwick, Manufacturer, and HENRY HOPE, of Birmingham, aforesaid, Manufacturer, for an invention for—"Improvements in valves for water, steam and gas." *Provisional protection only.*

WESTON.
VIVIAN.
25th April 1863.

1032. THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, and CHARLES VIVIAN, of Birmingham, aforesaid, Machinist, for an invention for—"Improvements in pulleys, capstans and other machines for raising weights and transmitting motive-power." *Provisional protection only.*

NUNN.
NUNN.
25th April 1863.

1033. JOHN PHILLIPS NUNN, and EDMUND BROOK NUNN, of Royston, in the County of Cambridge, Farmers, for an invention for—"Improvements in hoes and cultivators." *Letters Patent sealed.*

DUNBAR.
WOODFORD.
25th April 1863.

1034. JAMES DUNBAR, junior, and JOHN WYMEN WOODFORD, both of 12, Sutherland Street, Walworth, in the County of Surrey, for an invention for—"Improvements in apparatus for steering and manœuvring ships and vessels." *Letters Patent sealed.*

BRUET.
25th April 1863.

1035. LOUIS ALEXANDRE JOSEPH BRUET, of Paris, France, Clock Maker, for an invention for—"Improvements in apparatus for registering, indicating and verifying the time and distance passed over by vehicles, also applicable to machinery and other similar purposes. *Letters Patent sealed.*

POIRRIER.
CHAPPAT.
25th April 1863.

1036. ALCIDE POIRRIER, of Paris, and CHARLES CHAPPAT, Fils, of Paris, Manufacturers, for an invention for—"Improvements in the manufacture of blue and violet coloring matters suitable for dyeing and printing. *Letters Patent sealed.*

WALTON.
25th April 1863.

1037. FREDERICK WALTON, of the British Grove Works, Chiswick, in the County of Middlesex, for an invention for—"Improvements in the manufacture of fabrics for covering floors and other surfaces, and in the apparatus employed therein." *Provisional protection only.*

BEYER.
25th April 1863.

1038. CHARLES BEYER, of the firm Beyer, Peacock & Co., Gorton Foundry, Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in safety valves."—*A communication to him from abroad by Johann Andreas Schubert, Professor of Engineering at the Polytechnic School, at Dresden.* *Letters Patent sealed.*

DIMOCK.
25th April 1863.

1039. IRA DIMOCK, Machinist, of Hampshire County, in the State of Massachusetts, United States of North America, temporarily residing at the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery for cleaning, sorting according to size, and doubling silk and other threads." *Letters Patent sealed.*

LEGRAS.
25th April 1863.

1040. ALEXANDRE LEGRAS, of 64, Davies Street, Berkeley Square, in the County of Middlesex, Confectioner, for an invention for—"Improvements in machinery or apparatus for making ices." *Letters Patent sealed.*

STROUD.
25th April 1863.

1041. JOHN THOMAS STROUD, of Birmingham, in the County of Warwick, Lamp and Chandelier Manufacturer, for an invention for—"Improvements in the manufacture of and in the machinery and appliances for holding, drilling, turning, tapping, fitting and shaping certain parts of steam, water, gas and lamp fittings." *Provisional protection* NOT *granted.*

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NEWTON.
25th April 1863.

1042. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in threshing machines, part of which improvements are also applicable for hulling, decorticating, cleaning and polishing grains and seeds."—*A communication to him from abroad by Aristide Barbier and Nicolas Edouard Daubrée, both of Clermont, in the Empire of France.* *Letters Patent sealed.*

NEWTON.
25th April 1863.

1043. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Louis Therasson, of New York City, in the United States of America.* *Letters Patent sealed.*

BARLAND.
25th April 1863.

1044. MARGARET BARLAND, of Mount Street, Grosvenor Square, in the County of Middlesex, for an invention for—"An improved apparatus for milking cows."—*A communication to her from abroad by Thomas Barland, resident at Eau Clair, Wisconsin, in the United States of America.* *Provisional protection* NOT *granted.*

OSBORNE.
27th April 1863.

1045. SAMUEL OSBORNE, of Bayswater, in the County of Middlesex, Stay and Crinoline Skirt Manufacturer, for an invention for—"An improved machine for unwinding crinoline steel." *Provisional protection only.*

SPILL.
BRIGGS.
SPILL.
27th April 1863.

1046. GEORGE SPILL, and THOMAS JAMES BRIGGS, and DANIEL SPILL, all of Hackney Wick, in the County of Middlesex, for an invention for—"Improvements in the manufacture of mill straps and driving bands." *Provisional protection* NOT *granted.*

CARCHON.
RAYBAUD.
27th April 1863.

1047. HILAIRE EMILE CARCHON, Feather Dealer, and EUGÈNE FRANÇOIS RAYBAUD, Hat and Bonnet Maker, of 17, Rue Thévenot, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of hats and bonnets, and mode of preparing feathers to be used in the said manufacture." *Letters Patent sealed.*

ROBERT.
27th April 1863.

1048. JEAN JOSEPH ROBERT, of No. 112, Rue du Temple, Paris, in the Empire of France, Manufacturer of Spoons and Forks, for an invention for—"Improvements in the manufacture of spoons and forks." *Letters Patent sealed.*

GEDGE.
27th April 1863.

1049. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in twyers or blast pipes and in apparatus connected therewith."—*A communication to him from abroad by Jean Baptiste Monsallié, of Paris, France.* *Provisional protection only.*

VALKENHUYZEN.
27th April 1863.

1050. MAURICE VALKENHUYZEN, of Paris, in the Empire of France, Gentleman, for an invention for—"A new caster for furniture." *Letters Patent sealed.*

RICHARDS.
27th April 1863.

1051. WESTLEY RICHARDS, of Birmingham, in the County of Warwick, for an invention for—"Improvements in ordnance, fire-arms and cartridges." *Provisional protection only.*

JEFFREYS.
27th April 1863.

1052. JULIUS JEFFREYS, of Upper Norwood, in the County of Surrey, for an invention for—"Improvements in constructing surface condensers and apparatus for heating and cooling fluids." *Provisional protection only.*

BENNETT.
27th April 1863.

1053. FREDERICK BENNETT, of Holywell, in the County of Flint, Metallurgist, for an invention for—"Improved method of condensing lead and other metallic fumes and vapours from furnaces." *Letter Patent sealed and specification filed by order.*

BROOMAN.
27th April 1863.

1054. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in twisting and doubling silk and in frames employed therein."—*A communication to him from abroad by Auguste Tastevin, of Lyons, France.* *Provisional protection only.*

JAMES.
27th April 1863.

1055. WILLIAM HENRY JAMES, of Old Kent Road, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in indicating the locality of fire, applicable also to denoting the position of ships." *Provisional protection only.*

HUDSON.
CATLOW.
27th April 1863.

1056. WILLIAM HUDSON, of Burnley, in the County of Lancaster, Gentleman, and CHRISTOPHER CATLOW, of the same place, Overlooker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

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ROLLASON. 27th April 1863.

1057. ALEXANDER ROLLASON, of East Peckham, in the County of Surrey, Chemist, for an invention for—"Improvements in dyeing and staining fabrics, parts of which improvements are also applicable for dyeing, staining and ornamenting glass and other substances." *Provisional protection only.*

BEARE. 27th April 1863.

1058. HENRY BEARE, of Newton Abbot, in the County of Devon, Agricultural Implement Maker, for an invention for—"Improvements in machines for threshing out corn from its straw, part of which is applicable for combing the straw." *Letters Patent sealed.*

INGLEDEW. 28th April 1863.

1059. SILVESTER INGLEDEW, of Stockton-on-Tees, in the County of Durham, Wharfinger, for an invention for—"Certain improvements in the method of obtaining iron from its ore, and in the subsequent treatment thereof for converting the product into a metallic state, and in apparatus connected therewith." *Provisional protection only.*

MARRIS. MARRIS. 28th April 1863.

1060. JOHN MARRIS, and WILLIAM MARRIS, both of Great Grimsby, in the County of Lincoln, for an invention for—"An improved machine for breaking loaf sugar." *Letters Patent sealed.*

CRABTREE. 28th April 1863.

1061. SAMUEL CRABTREE, of Bradford, in the County of York, Manager, for an invention for—"Improvements in balling motions." *Letters Patent sealed.*

HALL. WELLS. 28th April 1863.

1062. GEORGE HALL, of the City of Worcester, in the County of Worcester, and JOSIAH WELLS, also of the City of Worcester, aforesaid, for an invention for—"A new explosive compound applicable for all the purposes for which gunpowder is or may be used. *Letters Patent sealed.*

KINDER. 28th April 1863.

1063. ARTHUR KINDER, of 20, Cannon Street, in the City of London, Engineer, for an invention for—"Improvements in the manufacture of sheet metal and in ingots or plates of metal, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

CLARK. 28th April 1863.

1064. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery for the manufacture of paper and of the various kinds of boards produced from fibrous substances."—*A communication to him from abroad by John Franklin Jones, of Rochester, Monroe County, State of New York, United States of America.* *Letters Patent sealed.*

FULLER. 28th April 1863.

1065. GEORGE WASHINGTON FULLER, a Citizen of the United States of America, and a resident of Cambridge Port, in the County of Middlesex, and State of Massachusetts, for an invention for—"A new and useful or improved submarine lantern to be used in explorations beneath the surface of the ocean or any other large body of water." *Complete specification; Letters Patent sealed.*

JOHNSON. 28th April 1863.

1066. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in drying and cooling grain and in the machinery or apparatus employed therein."—*A communication to him from abroad by William Henry Sutton and James John Gibson, both of the Town of Brantford, County of Brant, in the Province of Canada, Machinists.* *Letters Patent sealed.*

JOHNSON. 28th April 1863.

1067. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for preserving property in case of shipwreck."—*A communication to him from abroad by George Mitchell, of Toronto, in the Province of Canada West.* *Letters Patent sealed.*

MACDONALD. 28th April 1863.

1068. GEORGE SAMUEL MACDONALD, of Meard's Street, Soho, in the County of Middlesex, for an invention for—"Improvements in card cases." *Provisional protection only.*

MOORE. 28th April 1863.

1069. THOMAS MOORE, of 27, Leadenhall Street, London, for an invention for—"Improved apparatus for laying down, protecting and controlling submarine cables, for telegraphing from vessels moored off a coast to the shore." *Letters Patent sealed.*

BUTTERWORTH. 28th April 1863.

1070. RICHARD BUTTERWORTH, of Failsworth, in the County of Lancaster, Mechanic, for an invention for—"Certain improvements in carding-engines to be employed for carding cotton and other fibrous substances." *Letters Patent sealed.*

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DAVIES. 28th April 1863.

1071. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved machine for agitating and mixing substances."—*A communication to him from abroad by James Holmes Harper and James Harper Peabody, both of Philadelphia, Pennsylvania, United States of America.*
Letters Patent sealed.

DONISTHORPE. 28th April 1863.

1072. GEORGE EDMOND DONISTHORPE, of Leeds, in the County of York, for an invention for—"Improvements in apparatus used when getting coal and other minerals."
Letters Patent sealed.

SCOTT. 28th April 1863.

1073. HENRY YOUNG DARRACOTT SCOTT, of Brompton Barracks, near Chatham, in the County of Kent, Captain in the Royal Engineers, for an invention for—"Improvements in the manufacture of cementitious substances."
Letters Patent sealed.

MARLING. 28th April 1863.

1074. SAMUEL STEPHENS MARLING, of Stanley Park, in the County of Gloucester, Woollen Cloth Manufacturer, for an invention for—"Improved machinery for scouring, washing and cleansing woollen cloths and other fabrics."
Letters Patent sealed.

ROWLEY. 29th April 1863.

1075. JOHN ROWLEY, of Stafford Street, Peckham, in the County of Surrey, for an invention for—"Improvements in the means or apparatus employed for recovering the fibres of wool from fabrics or materials composed of wool combined with cotton or other vegetable substances."
Letters Patent sealed.

ROWLAND. 29th April 1863.

1076. ELLIS ROWLAND, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in apparatus for weighing solid bodies and for measuring fluids, parts of which improvements are also applicable to the opening and closing of 'dampers.'"
Complete specification; protection for SIX *months only.*

TARR. FARR. 29th April 1863.

1077. WILLIAM TARR, of 112, York Street, Oxford Street, Manchester, and ENOCH FARR, of 40, Cavendish Street, Oxford Street, Manchester, for an invention for—"An improvement in pianofortes."
Letters Patent sealed.

GEDGE. 29th April 1863.

1078. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved system of permanent advertisement."—*A communication to him from abroad by Basile Victor Larsonneau, of the Faubourg Saint Martin, Paris, France.*
Provisional protection only.

LEIGH. LEIGH. 29th April 1863.

1079. EVAN LEIGH, and FREDERICK ALLEN LEIGH, of the City of Manchester, in the County of Lancaster, Mechanical Engineers, for an invention for—"Improvements in cotton gins and in the method of driving the same, part of which improvements is applicable to other purposes."
Letters Patent sealed.

RODGER. 29th April 1863.

1080. WILLIAM RODGER, of No. 9, Shawfield Street, King's Road, Chelsea, in the County of Middlesex, Captain in the Royal Navy, for an invention for—"Improvements in anchors."
Letters Patent sealed.

WORMS. 29th April 1863.

1081. HENRY WORMS, of 27, Park Crescent, Portland Place, in the County of Middlesex, for an invention for—"Improvements in apparatus for elevating guns."
Letters Patent sealed.

BARLAND. MONCKTON. 29th April 1863.

1082. MARGARET BARLAND, of Mount Street, Grosvenor Square, and EDWARD HENRY CRADOCK MONCKTON, of the Cavendish Club, Regent Street, both in the County of Middlesex, for an invention for—"Improvements in apparatus for withdrawing milk from cows and other mammiferæ, and for conducting it when withdrawn to appropriate receivers."—*The result partly of communication from abroad made to them by Thomas Barland, resident at Eau Clair, Wisconsin, in the United States of America, and partly of invention and discovery made by themselves.*
Letters Patent sealed.

GRETTON. 29th April 1863.

1083. FREDERICK GRETTON, of Burton-upon-Trent, in the County of Stafford, Brewer, for an invention for—"Improvements in heating the contents of mash tuns."
Provisional protection only.

HOLCROFT. 29th April 1863.

1084. GEORGE HOLCROFT, of the City of Manchester, Engineer, for an invention for—"Improvements in the construction of pyrometers."
Provisional protection only.

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RIPLEY. 29th April 1863.

1085. HENRY WILLIAM RIPLEY, of Montpellier Lawn, Cheltenham, for an invention for—"Improvements in apparatus for printing fibrous materials."—*A communication to him from abroad by Stanislas Vigoureux, a person resident at Reims, in the Empire of France.* *Letters Patent sealed.*

HENRY. 29th April 1863.

1086. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for manufacturing beton and artificial stone, pugging clay and other similar purposes, and in the production of artificial stone, and artistic, ornamental and decorative articles, works and surfaces." —*A communication to him from abroad by François Coignet, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

WIBBERLEY. 30th April 1863.

1087. JOHN WIBBERLEY, of the City of Manchester, in the County of Lancaster, Mechanic, for an invention for—"Improvements in machinery or apparatus for winding cotton, silk, wool or other threads on spools or reels." *Letters Patent sealed.*

RÉMOND. 30th April 1863.

1088. ALFRED HENRY RÉMOND, of No. 4, Moorgate Street, in the City of London, for an invention for—"An improved process for retaining the aroma of coffee and cocoa." *Provisional protection only.*

CLARK. 30th April 1863.

1089. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of hydrocyanate of ammonia and of alkaline and earthy cyanides."—*A communication to him from abroad by Louis Joseph Frédéric Marguerite, of 29, Boulevart St. Martin, Paris, Chemist.* *Letters Patent sealed.*

MITCHELL. 30th April 1863.

1090. EDWARD MITCHELL, of Cams Alders Lodge, Fareham, in the County of Hampshire, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed; no specification filed.*

BREWER. 30th April 1863.

1091. EDWARD GRIFFITH BREWER, of the firm of Willcock and Brewer, of 89, Chancery Lane, in the County of Middlesex, and 24, Market Place, in the City of Manchester, Engineers and Patent Agents, for an invention for—"Improvements in welding and rolling metals and in machinery connected therewith."—*A communication to him from abroad by Michel Helson, of Hammont, France.* *Letters Patent sealed.*

STEWART. KERSHAW. 30th April 1863.

1092. CHARLES PATRICK STEWART, of the "Atlas Works," Manchester, in the County of Lancaster, Mechanical Engineer, and JOHN KERSHAW, of Duke Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in engines, machinery and apparatus for obtaining compressed air, and for applying the power thereof in propelling railway and other carriages." *Letters Patent sealed.*

APPLEBY. 30th April 1863.

1093. JOSHUA APPLEBY, of the City of Manchester, Tea Merchant, for an invention for—"Improvements in propelling ships and barges." *Letters Patent sealed.*

JOHNSON. 30th April 1863.

1094. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rotatory engines." —*A communication to him from abroad by Wilhelm Heinrich Christian Voss, of Berlin, in the Kingdom of Prussia, Engineer.* *Letters Patent sealed; no specification filed.*

GRAY. 1st May 1863.

1095. JOHN MCFARLANE GRAY, of No. 80, Prince Edwin Street, Liverpool, Engineer, for an invention for—"Portable apparatus or instruments for rivetting, caulking, chipping and otherwise operating upon and treating metals and other substances." *Letters Patent sealed.*

JONES. 1st May 1863.

1096. EDWARD JONES, of Charlton, in the County of Kent, for an invention for —"Improvements in drainage and in water-closets, and in the means and apparatus necessary for the same respectively." *Provisional protection only.*

CLISSOLD. 1st May 1863.

1097. WILLIAM CLISSOLD, of Dudbridge, in the County of Gloucester, Engineer, for an invention for—"Improved apparatus for fulling woollen cloths and washing and cleansing woven fabrics." *Letters Patent sealed.*

CRAIG. 1st May 1863.

1098. WILLIAM GRINDLEY CRAIG, of Cannon Street, in the City of London, Engineer, for an invention for—"Improvements in feed apparatus for steam-boilers." —*A communication to him from abroad by Michel Turck, of Paris, France.* *Letters Patent sealed.*

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BADART. 1st May 1863.

1099. JOSEPH BADART, of No. 9, Bishopsgate Street, in the City of London, for an invention for—"Improvements in the preparation of rape seed cake, linseed cake, poppy seed cake, niger seed cake, sesseme seed cake, and ground nut cake."
Letters Patent sealed.

BISSELL. 2nd May 1863.

1100. TITUS LUCRETIUS BISSELL, of Charleston, in the State of South Carolina, North America, for an invention for—"An improved apparatus for charging breech-loading cartridges."
Provisional protection only.

SMITH. 2nd May 1863.

1101. WILLIAM THOMAS SMITH, of Dalston, in the County of Middlesex, Engineer, for an invention for—"Improvements in washing-machines."
Provisional protection only.

GIBSON. TURNER. 2nd May 1863.

1102. JOHN WILLIAM GIBSON, of 31, Lower Ormond Quay, Dublin, and WILLIAM TURNER, of Hammersmith Iron Works, Dublin, for an invention for—"Improvements in springs to be used for railway buffers, draw hooks, and also for carrying springs of railway carriages and other vehicles."
Provisional protection only.

BURT. 2nd May 1863.

1103. GEORGE BURT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in machinery for punching, stamping or forging metals."
Provisional protection only.

PURDEY. 2nd May 1863.

1104. JAMES PURDEY, of Oxford Street, in the County of Middlesex, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

BARTLETT. 2nd May 1863.

1105. SAMUEL JOHN BARTLETT, of Maidstone, in the County of Kent, Watch and Clock Maker, for an invention for—"Improvements in apparatus for straining and drawing off liquids."
Letters Patent sealed.

DUBREUIL. 2nd May 1863.

1106. JEAN BAPTISTE DUBREUIL, of Paris, Rue du Faubourg Saint Denis, No. 108, Gentleman, for an invention for—"Improvements in carts, waggons and other vehicles."
Provisional protection only.

OAKLEY. OAKLEY. 2nd May 1863.

1107. JOHN THOMAS OAKLEY, and THOMAS OAKLEY, both of Grange Road, Bermondsey, Engineers and Millwrights, for an invention for—"Improvements in the construction of garden pumps, part of which said improvements are applicable to fire-engines and other hydraulic machines."
Letters Patent sealed.

MYERS. 2nd May 1863.

1108. HENRY MYERS, of Paris, Rue Meslay, No. 55, in the French Empire, for an invention for—"A new apparatus for indicating appointments or fixed engagements."
Provisional protection only.

SOUTHBY. 4th May 1863.

1109. EDMUND RICHARD SOUTHBY, of Wareham, in the County of Dorset, for an invention for—"Improvements in the extraction of scents from plants, flowers and other odoriferous substances."
Provisional protection only.

FORTUNE. 4th May 1863.

1110. JOHN FORTUNE, of Moreton, near Bingley, in the County of York, for an invention for—"Improved means of joining or fastening together lace, blond, quilling or similar materials."
Letters Patent sealed.

JOHNSON. JOHNSON. JOHNSON. BERTLING. 4th May 1863.

1111. JOHN MORRIS JOHNSON, EDMUND JOHNSON, and CHARLES JOHNSON, all of Castle Street, Holborn, in the City of London, Show Tablet Manufacturers and Printers, and LOUIS BERTLING, of Ironmonger Street, Saint Luke's, in the County of Middlesex, Draughtsman, for an invention for—"Improvements in the production of show tablets, advertisement tablets, name plates, architectural facings and decorations, and other ornamental, decorative and inscriptive articles."
Letters Patent sealed.

SLOPER. 4th May 1863.

1112. BEVAN GEORGE SLOPER, of Walthamstow, in the County of Essex, Engineer, for an invention for—"Improvements in apparatus for separating metals from earthy and other matters mixed with them."
Letters Patent sealed.

HASELTINE. 4th May 1863.

1113. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in springs for railway carriages and other purposes."—*A communication to him from abroad by Richard Vose, of the City, County and State of New York, United States of America.*
Letters Patent sealed.

APPLEGATE. 4th May 1863.

1114. FRANK APPLEGATE, of Bradford-on-Avon, in the County of Wilts, Woollen Manufacturer, for an invention for—"Improvements in spring balances and pressure guages."
Provisional protection only.

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JOHNSON. 5th May 1863.

1115. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of wrought iron and steel, and in the apparatus to be employed therein."—*A communication to him from abroad by Adrien Muller, of Paris, in the Empire of France, Manufacturer.* *Letters Patent sealed*

WALSH. 5th May 1863.

1116. WILLIAM WALSH, of the City of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in obtaining and purifying oxalate of soda, which improvements are also applicable to the manufacture of oxalic acid." *Letters Patent sealed.*

KENT. 5th May 1863.

1117. ROBERT GEORGE KENT, of Old Compton Street, Soho, in the County of Middlesex, Tool and Metal Warehouseman, for an invention for—"Improvements in the construction and arrangement of shades and reflectors for gas lights." *Letters Patent sealed.*

CHESSHIRE. 5th May 1863.

1118. EDWIN CHESSHIRE, of Birmingham, in the County of Warwick, Surgeon, for an invention for—"Improvements in apparatus for intercepting the solid portions of the soil of water-closets. *Letters Patent sealed.*

BOOTHROYD. 5th May 1863.

1119. WILLIAM BOOTHROYD, of Halifax, in the County of York, Bobbin Manufacturer, for an invention for—"Improvements in stationary engines or apparatus for obtaining motive-power." *Provisional protection only.*

BROOMAN. 5th May 1863.

1120. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A new fabric suitable for trimmings."—*A communication to him from abroad by Jacques Desprez and Georges Montaillé, both of Paris, France.* *Provisional protection only.*

APPLEGATE. 5th May 1863.

1121. FRANK APPLEGATE, of Bradford-on-Avon, in the County of Wilts, Woollen Manufacturer, for an invention for—"Improvements in stopping and starting railway trains." *Provisional protection only.*

BRADSHAW. 5th May 1863.

1122. PETER BRADSHAW, of Earls Barton Mills, in the County of Northampton, for an invention for—"Improvements in mounting or hanging mill stones for grinding grain and other substances." *Letters Patent sealed.*

KNOTT. 5th May 1863.

1123. JOSEPH HENRY KNOTT, of Nelson Square, Blackfriars Road, in the County of Surrey, Engineer, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

GLOVER. 5th May 1863.

1124. WILLIAM GLOVER, of South Shields, in the County of Durham, Ship Chandler, for an invention for—"Improvements in means or apparatus to facilitate the steering of ships and other vessels. *Letters Patent sealed.*

WILKINS. 5th May 1863.

1125. WILLIAM CRANE WILKINS, of Long Acre, in the County of Middlesex, Lighthouse Engineer, for an invention for—"Improvements in lamps." *Letters Patent sealed.*

COCHRAN. 5th May 1863.

1126. SAMUEL BEACH COCHRAN, of 48, Fleming Road, Kennington, in the County of Surrey, Machinist, for an invention for—"Improvements in sewing-machines and in apparatus connected therewith." *Letters Patent sealed.*

SAGAR. WILKINSON. 6th May 1863.

1127. THOMAS SAGAR, of Burnley, in the County of Lancaster, Machine Maker, and JOHN WILKINSON, of the same place, Foreman, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

WARD. 6th May 1863.

1128. JAMES TOWNSEND WARD, of Swansea, in the County of Glamorgan, Carriage Builder, for an invention for—"Improvements in carriages." *Provisional protection only.*

GEDGE. 6th May 1863.

1129. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved toy."—*A communication to him from abroad by Paul Bonfils, of the Rue St. Amboise, Paris, France.* *Provisional protection only.*

HIBBERT. LAWTON. KAY. 6th May 1863.

1130. SAMUEL HIBBERT, Shopkeeper, JOHN LAWTON, Smith, and JAMES KAY, Agent, all of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in apparatus for cleansing potatoes, and in decorticating the same and other esculent roots." *Letters Patent sealed.*

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MAC-KELLEN. 6th May 1863.

1131. SAMUEL DUNSEITH MAC-KELLEN, of Manchester, in the County of Lancaster, Watch Manufacturer, for an invention for—"Certain improvements in watches and other time-keepers." *Letters Patent sealed.*

SINGER. 6th May 1863.

1132. ISAAC MERRITT SINGER, of New York, but now residing at Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

DAVIES. 6th May 1863.

1133. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in machinery or apparatus for forging and dressing horse-shoe and other nails."—*A communication to him from abroad by Charles Alexandre Lourrier, of Paris, Machinist.* *Letters Patent sealed.*

BEESLEY. 6th May 1863.

1134. THOMAS BEESLEY, of Symond's Inn, in the County of Middlesex, Wine and Beer Merchant, for an invention for—"Improvements in the construction of boxes or cases for carrying and packing bottles." *Provisional protection only.*

STURROCK. 6th May 1863.

1135. ARCHIBALD STURROCK, of Doncaster, in the County of York, Engineer, for an invention for—"Improvements in locomotive engines and tenders." *Letters Patent sealed.*

ATKINSON. 6th May 1863.

1136. CHARLES WILKINS ATKINSON, of 34, Montague Place, Russell Square, in the County of Middlesex, Engineer, for an invention for—"An improved steam or other motive-power engine." *Provisional protection only.*

NEWTON. 6th May 1863.

1137. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by James Alford House and Henry Alonzo House, both of Brooklyn, Kings County, New York State, United States of America.* *Letters Patent sealed.*

PARK. 7th May 1863.

1138. JAMES PARK, of Bury, in the County of Lancaster, Engineer, for an invention for—"Improvements in communicating motion to machinery for manufacturing paper pulp." *Letters Patent sealed.*

SNIDER. 7th May 1863.

1139. JACOB SNIDER, junior, of Dorset Street, in the City of London, Merchant, for an invention for—"Improvements in breech-loading fire-arms and ordnance." *Provisional protection only.*

BOURNE. 7th May 1863.

1140. PETER BOURNE, of Whitehaven, in the County of Cumberland, Colliery-Viewer, for an invention for—"Improvements in miners' lamps." *Letters Patent sealed; no specification filed.*

WALKER. 7th May 1863.

1141. JOHN WALKER, of Crompstall Bridge, near Stockport, in the County of Chester, Mechanic, for an invention for—"Improvements in the construction of mechanism applicable to looms and partly to carding-engines and other machinery." *Provisional protection only.*

STANLEY. 7th May 1863.

1142. ALFRED STANLEY, of Walsall, in the County of Stafford, Covered Buckle Manufacturer, for an invention for—"Certain improvements in the mode of finishing clasps and other such like metallic connectors, and which said mode of finish is also applicable for other purposes." *Provisional protection only.*

BOWER. DICK. 7th May 1863.

1143. GEORGE BOWER, of St. Neot's, in the County of Huntingdon, Gas Engineer, and ALEXANDER DICK, of Alfred Street, City Road, in the County of Middlesex, Chemist, for an invention for—"Improvements in the purification of gas ordinarily used in illuminating, and in the reduction of ores and smelting of metals by means of such gas so purified." *Letters Patent sealed.*

SMALL. 7th May 1863.

1144. THOMAS SMALL, of Bargate, Boston, Lincolnshire, for an invention for—"Improvements in motive-power machinery." *Provisional protection only.*

BETTRIDGE. 7th May 1863.

1145. JOHN BETTRIDGE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the ornamentation of papier mâché or other japanned wares, wood, ivory or other similar materials." *Letters Patent sealed.*

DAY. LAMB. SUMMERS. 7th May 1863.

1146. CHARLES ARTHUR DAY, ANDREW LAMB, and THOMAS SUMMERS, Engineers, in the Town and County of Southampton, for an invention for—"Improvements in marine engines." *Letters Patent sealed.*

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THIERRY. 7th May 1863.

1147. JEAN BAPTISTE PIERRE ALFRED THIERRY, Engineer, of Paris, 91, Rue des Marais St. Martin, for an invention for—"Improvements in the arrangement or construction of furnaces to render the combustion of the fuel more complete and to prevent the emission of smoke therefrom." *Letters Patent sealed.*

HOLLIDAY. 7th May 1863.

1148. THOMAS HOLLIDAY, of Huddersfield, in the County of York, Manufacturing Chemist, for an invention for—"An improved blue colouring matter." *Provisional protection only.*

LIVSEY. 8th May 1863.

1149. PETER JOEL LIVSEY, of the City of Manchester, in the County of Lancaster, Consulting Engineer and Patent Agent, for an invention for—"Improvements in compound steam-engines."—*A communication to him from abroad by Levi Leigh, of St. Petersburg, Russia, Cotton Spinner.* *Letters Patent sealed.*

SKWARCOW. 8th May 1863.

1150. ALEXANDER SKWARCOW, of No. 24, Leadenhall Street, in the City of London, Merchant, for an invention for—"Improvements in the construction of turntables."—*A communication to him from abroad by Signore Rombeaux, Chief Engineer of the Victor Emmanuel Railway, Turin, Italy.* *Provisional protection only.*

SCHOOLING. 8th May 1863.

1151. HENRY SCHOOLING, of 5, 6, and 7, North Side, Bethnal Green, in the County of Middlesex, for an invention for—"Improvements in moulding or shaping lozenge paste or other plastic materials." *Letters Patent sealed.*

GRIMSHAW. 8th May 1863.

1152. JOHN SMALLEY GRIMSHAW, of Huncoat, near Accrington, in the County of Lancaster, Spinner and Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

BRAITHWAITE. HIRST. 8th May 1863.

1153. CHARLES LLOYD BRAITHWAITE, of Kendal, in the County of Westmoreland, Manufacturer, and JOSEPH HIRST, of the same place, Manager, for an invention for—"Improvements in machinery for feeding slivers of wool and other material to carding-engines." *Letters Patent sealed.*

BAILEY. 8th May 1863.

1154. JOSEPH HENRY BAILEY, Civil Engineer, of the City and State of New York, in the United States of America, for an invention for—"An improved mechanical movement for producing an impelled current of air for lamps, and which may be used for other purposes."—*A communication from Francis Bernard de Keravenan, a person resident lately at New York, United States, but now at Paris, France.* *Letters Patent sealed.*

DROOP. 8th May 1863.

1155. JUSTUS CHARLES DROOP, Partner in the firm of Messieurs Bever and Klophaus, Tool Manufacturers, of Schwelm, in the Kingdom of Prussia, for an invention for—"An instrument or holder for holding nails, screws or other fastenings." *Provisional protection only.*

CLARK. 8th May 1863.

1156. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in coating wrought or other iron to protect it from corrosion or oxydation."—*A communication to him from abroad by George Washington Holley, of Niagara, in the County of Niagara, and State of New York, United States of America.* *Letters Patent sealed.*

BOËT. 8th May 1863.

1157. EVARISTE CHAMONIN BOËT, of Lille, Department du Nord, in the Empire of France, for an invention for—"Improvements in tanning hides and skins."—*A communication from Jean Baptiste Vanrymenant, a person resident at Bruxelles, in the Kingdom of Belgium.* *Letters Patent sealed.*

BIELEFELD. 8th May 1863.

1158. CHARLES FREDERICK BIELEFELD, of Gower Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture of sheets, slabs and other articles when fibrous materials are employed." *Letters Patent sealed.*

BOUSFIELD. 8th May 1863.

1159. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Francis Bowes Stevens, a person resident at New York, in the United States of America.* *Letters Patent sealed.*

THOMSON. 9th May 1863.

1160. WILLIAM THOMSON, of Coatbridge, Glasgow, in the County of Lanark, Locomotive Engineer, for an invention for—"Improvements in obtaining motive-power, which improvements are applicable in part for raising or forcing fluids into steam-boilers, tanks and other vessels." *Letters Patent sealed.*

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STICKLAND. 9th May 1863.

1161. JAMES STICKLAND, of No. 25½, Gee Street, Saint Luke, in the County of Middlesex, for an invention for—"Improvements in laying veneers on to surfaces, in applying the glue for that purpose, and in the apparatus employed."
Letters Patent sealed.

WILSON. 9th May 1863.

1162. SAMUEL WILSON, of the City of Manchester, Engineer, for an invention for—"Improvements in hoops or bands for fastening bales and in machinery or apparatus for making the same."
Provisional protection only.

GEDGE. 9th May 1863.

1163. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of paper stuff or pulp from certain vegetable substances."—*A communication to him from abroad by Lucien Bardoux, of Poitiers, in the Empire of France.*
Complete specification; Letters Patent sealed.

NORIE. 9th May 1863.

1164. JAMES NORIE, of Glasgow, in the County of Lanark, North Britain, Iron-founder, for an invention for—"Improvements in making moulds for casting and in apparatus therefor."
Letters Patent sealed.

PAGE. WAYNE. 9th May 1863.

1165. JOSEPH PAGE, of Birmingham, in the County of Warwick, Manufacturer, and ALFRED THOMAS WAYNE, of the same place, Tool Maker, for an invention for—"An improvement or improvements in the manufacture of pens."
Provisional protection only.

BRIERLEY. 9th May 1863.

1166. JOHN BRIERLEY, of the firm of Thomas Brierley, of Denby Dale, near Huddersfield, in the County of York, Dyer, for an invention for—"Improvements in dyeing knickerbocker yarns and textile fabrics manufactured of or from such yarns."
Provisional protection only.

BOALER. 9th May 1863.

1167. WILLIAM BOALER, of No. 85, Piccadilly, in the City of Manchester, Merchant, for an invention for—"An improved dryer fabric for paper making."
Letters Patent sealed.

CLARK. 9th May 1863.

1168. EDWARD RAWSON CLARK, of Drayton Villa, Thistle Grove, West Brompton, for an invention for—"An improvement in the construction of portable wine cases or bins for domestic use or export, and a pic-nic chest combined."
Letters Patent sealed.

LEGENDRE. 9th May 1863.

1169. NARCISSE LEGENDRE, of Saint Pierre les Calais (Pas de Calais), Empire of France, and of 89, Chancery Lane, London, for an invention for—"Improvements in the construction of scissors."
Provisional protection only.

BROOMAN. 9th May 1863.

1170. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of lamp black."—*A communication to him from abroad by Johan Ephraim Lundgren, of Stockholm, Sweden.*
Provisional protection only.

WOOD. 9th May 1863.

1171. JOHN BLAND WOOD, of Vernon House, Camp Street, Broughton, near Manchester, M.D., for an invention for—"Improvements applicable to the defending of ships or vessels and forts when armour plating is employed."
Provisional protection only.

BURRELL. 9th May 1863.

1172. JAMES BURRELL, of No. 85, Back Church Lane, Whitechapel, in the County of Middlesex, for an invention for—"Improvements in machinery for cutting the teeth of bevelled wheels."
Letters Patent sealed.

WILLIAMS. 9th May 1863.

1173. CHARLES HANSON GREVILLE WILLIAMS, of Rumford Street, Glasgow, for an invention for—"Improvements in the manufacture of coloring matters."
Letters Patent sealed.

BURRELL. 9th May 1863.

1174. JAMES BURRELL, of No. 85, Back Church Lane, Whitechapel, in the County of Middlesex, for an invention for—"Improvements in salinometers."
Letters Patent sealed.

JOHNSON. 9th May 1863.

1175. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rotatory engines."—*A communication to him from abroad by Enrico Fava, of Gênes, in the Kingdom of Italy.*
Provisional protection only.

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LEE. GUTTERIDGE. 9th May 1863.

1176. JESSE LEE, and MATTHEW GUTTERIDGE, both of Church Gate, in the Borough of Leicester, for an invention for—"Improvements in agricultural implements." *Provisional protection* NOT *granted.*

HARGREAVES. 11th May 1863.

1177. BENJAMIN HARGREAVES, of Arden House, near Accrington, in the County of Lancaster, Gentleman, for an invention for—"Improvements in tiles for drainage or sanatory purposes." *Letters Patent sealed.*

BURGESS. 11th May 1863.

1178. ROBERT BURGESS, of the City of Manchester, in the County of Lancaster, Engraver to Calico Printers, for an invention for—"Improvements in machinery or apparatus for marking, etching or engraving cylindrical and other surfaces." *Letters Patent sealed.*

SHORROCK. SHORROCK. 11th May 1863.

1179. CHRISTOPHER SHORROCK, Manufacturer, and WILLIAM SHORROCK, Manager, both of Over Darwen, in the County of Lancaster, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

VAN TENAC. 11th May 1863.

1180. CHARLES LOUIS VAN TENAC, of Tredegar, Monmouthshire, South Wales, Civil Engineer, for an invention for—"A new wrought iron railway sleeper."—*A communication to him from abroad by Jean Arthur Granet, of 17, Rue Lafitte, Paris, in the Empire of France.* *Letters Patent sealed.*

VAN TENAC. 11th May 1863.

1181. CHARLES LOUIS VAN TENAC, of Tredegar, Monmouthshire, South Wales, Civil Engineer, for an invention for—"Armour plates of hammered or rolled wrought iron, the whole of the rivets being protected against the direct blows from the cannon shots." *Provisional protection only.*

PARKINSON. 11th May 1863.

1182. JAMES PARKINSON, of Tichbourne Street, Regent Street, in the City and Liberties of Westminster, for an invention for—"A new or improved mode of manufacturing tablets to be used for monumental purposes." *Provisional protection only.*

BROOMAN. 11th May 1863.

1183. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in coupling and disconnecting carriages on railways and in machinery employed therein."—*A communication to him from abroad by Bartolomé Castellei, of Madrid, Spain.* *Letters Patent sealed.*

GUIRETTE. 11th May 1863.

1184. JOSEPH SEVERIN GUIRETTE, of Paris, in the Empire of France, Doctor of Medicine, for an invention for—"An improved inhaling apparatus." *Provisional protection only.*

SHANKS. 11th May 1863.

1185. JAMES SHANKS, of Arbroath, in the County of Forfar, North Britain, Machinist, for an invention for—"Improvements in machinery for cutting or shearing the edges of grass or turf." *Letters Patent sealed; no specification filed.*

MCCONNELL. BOVILL. 11th May 1863.

1186. JAMES EDWARD MCCONNELL, of Dean's Yard, in the City of Westminster, Civil Engineer, and GEORGE HINTON BOVILL, of Dunsford Lodge, near Wandsworth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in chains for cables and other purposes." *Letters Patent sealed.*

LILLY. 12th May 1863.

1187. BENJAMIN LILLY, of Birmingham, in the County of Warwick, Brass Founder, for an invention for—"Improvements in the construction of 'snap caps' or 'nipple protectors' for fire-arms." *Letters Patent sealed.*

MATTISON. BARKER. 12th May 1863.

1188. WILLIAM MATTISON, and GEORGE BARKER, of Leeming Bar, near Bedale, in the County of York, Ironfounders, for an invention for—"Improvements in grass mowing and reaping machines." *Provisional protection only.*

WARREN. 12th May 1863.

1189. THOMAS WARREN, of Glasgow, in the County of Lanark, North Britain, Glass Bottle Manufacturer, for an invention for—"Improvements in glass and other furnaces or kilns." *Letters Patent sealed.*

WICKENS. 12th May 1863.

1190. HENRY WICKENS, of No. 4, Tokenhouse Yard, Bank, in the City of London, Solicitor, for an invention for—"Improvements in reaping and mowing machines."—*A communication to him from abroad by Richard Lamb Allen, of the City of New York, in the County and State of New York, in the United States of America.* *Provisional protection* NOT *granted.*

MCCONNELL. BOVILL. 12th May 1863.

1191. JAMES EDWARD MCCONNELL, of Dean's Yard, in the City of Westminster, Civil Engineer, and GEORGE HINTON BOVILL, of Dunsford Lodge, near Wandsworth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in treating worn out railway tyres." *Letters Patent sealed.*

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WHITELEY. 12th May 1863.

1192. WILLIAM WHITELEY, of the Prospect Iron Works, Lockwood, in the County of York, Iron and Brass Founder and Machinist, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HUDDART. 12th May 1863.

1193. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Carnarvon, Gentleman, for an invention for—"Improved apparatus for cutting slate." *Provisional protection only.*

EMERY. 12th May 1863.

1194. HORACE LEEMAN EMERY, of Sloane Street, Chelsea, in the County of Middlesex, for an invention for—"Improvements in apparatus for manufacturing saws suitable for ginning cotton and for other uses."—*A communication to him from abroad by George Washington Emery, of Albany, State of New York, United States of America.* *Letters Patent sealed.*

BROOMAN. 12th May 1863.

1195. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in spring mattresses."—*A communication to him from abroad by Madame Julie Adolphine Massé, of Paris, France.* *Letters Patent sealed.*

BROOMAN. 12th May 1863.

1196. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in spring mattresses, sofas, chairs, seats and similar articles"—*A communication to him from abroad by Marc Louis Denis, of Paris, France.* *Provisional protection only.*

BROOMAN. 12th May 1863.

1197. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for preparing, dressing and winding cotton, woollen, flax, silk and other warps."—*A communication to him from abroad by Pierre François Dacheux and Gustave Lefebvre, both of St. Quentin, France.* *Letters Patent sealed.*

RUSHTON. 13th May 1863.

1198. HENRY RUSHTON, of 48A, Northampton Road, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in head-dresses." *Provisional protection only.*

BROOMAN. 13th May 1863.

1199. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in laying submarine telegraph cables."—*A communication to him from abroad by Adolphe Pelegrin and Auguste Garbeiron, both of Paris, France.* *Letters Patent sealed.*

WILDE. 13th May 1863.

1200. HENRY WILDE, of the City of Manchester, Engineer, for an invention for—"Improvements in electro-magnetic telegraphs." *Letters Patent sealed.*

PARKINSON. TAYLOR. 13th May 1863.

1201. THOMAS PARKINSON, of Blackburn, in the County of Lancaster, Engineer, and FRANCIS TAYLOR, of the same place, Foreman, for an invention for—"Improvements in machinery for weaving, sizing, dressing and dyeing." *Letters Patent sealed.*

HOLTHAUSEN. 13th May 1863.

1202. FREDERIC HOLTHAUSEN, of No. 40, Rue de Richelieu, in the City of Paris, in the Empire of France, Manufacturer, for an invention for—"An improved portable copying press." *Provisional protection only.*

MCCONNELL. BOVILL. 13th May 1863.

1203. JAMES EDWARD MCCONNELL, of Dean's Yard, in the City of Westminster, Civil Engineer, and GEORGE HINTON BOVILL, of Durnsford Lodge, near Wandsworth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in the manufacture of thick plates of wrought iron for armour plates and other purposes." *Letters Patent sealed.*

CASSAIGNES. 13th May 1863.

1204. VICTOR JULIEN CASSAIGNES, of No. 8, Rue des Fosses St. Jacques, Paris, in the Empire of France, for an invention for—"Improvements in stereoscopes." *Letters Patent sealed*

HEUSNER. 13th May 1863.

1205. KARL LUDWIG HEUSNER, of East Greenwich, in the County of Kent, for an invention for—"Improvements in the manufacture of hydrate of barytes and in the manufacture of sugar." *Provisional protection only.*

LAMBERT. 13th May 1863.

1206. BENJAMIN LAMBERT, of 35, Lothian Road, Camberwell New Road, in the County of Surrey, for an invention for—"Improvements in paper makers' rag or pulp engines." *Letters Patent sealed.*

SOUTHBY. 13th May 1863.

1207. ANTHONY GAPPER SOUTHBY, of Bulford, in the County of Wilts, Engineer, for an invention for—"Improvements in railway roof lamps, station, signal and other fountain lamps." *Provisional protection only.*

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FARMER. 13th May 1863.

1208. JAMES FARMER, of Salford, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in calendering, embossing and other such machines used for finishing woven fabrics, part of which improvements is also applicable to drying machines." *Letters Patent sealed.*

BROOMAN. 13th May 1863.

1209. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the extraction of hydrocarburets from minerals, in the distillation thereof, and in apparatus employed therein."—*A communication to him from abroad by Felix Alexandre Testud de Beauregard, of Paris, France.* *Letters Patent sealed.*

LAWRENCE. 14th May 1863.

1210. THOMAS LAWRENCE, of Salford, in the County of Lancaster, Mechanic, for an invention for—"Certain improvements in machinery or apparatus used in the processes or operations of drying, dressing, brushing, waxing and finishing fabrics." *Letters Patent sealed.*

SATCHWELL. ASHFORD. HARRISON. 14th May 1863.

1211. JOHN SATCHWELL, WILLIAM HENRY ASHFORD, and CORNELIUS HARRISON, all of Birmingham, in the County of Warwick, Factors, for an invention for—"Improvements in nails or rivets for boots and shoes, applicable to other purposes." *Provisional protection only.*

PILBEAM. 14th May 1863.

1212. ALEXANDER PILBEAM, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

KING. 14th May 1863.

1213. JOHN THOMSON KING, of Liverpool, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in wicks for oil and other fluid burning lamps."—*A communication to him from abroad by Henry Coulter, of Philadelphia, in the State of Pennsylvania, one of the United States of America.* *Provisional protection only.*

BURRELL. 14th May 1863.

1214. JAMES BURRELL, of 85, Back Church Lane, Whitechapel, in the County of Middlesex, for an invention for—"Improvements in the construction of cocks or valves." *Provisional protection only.*

DOWLER. 14th May 1863.

1215. GEORGE DOWLER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in match boxes." *Provisional protection only.*

CHICHESTER. 14th May 1863.

1216. LEWIS SCUDDER CHICHESTER, of Brooklyn, in the State of New York, United States of America, for an invention for—"Improvements in machinery for weighing grain." *Letters Patent sealed.*

ERLAM. 14th May 1863.

1217. FREDERICK KEATE ERLAM, of Devonshire Terrace, Fulham Road, in the County of Middlesex, for an invention for—"A new lubricating material or compound." *Provisional protection only.*

BOUSFIELD. 14th May 1863.

1218. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machinery for rolling, grinding and cutting files and rasps."—*A communication to him from abroad by William Picket Pierce, of Boston, in the County of Suffolk, and State of Massachusetts, United States of America.* *Complete specification: Letters Patent sealed.*

PARKER. 14th May 1863.

1219. ISAAC PARKER, of Haughton Street, Clare Market, in the County of Middlesex, Machinist, for an invention for—"Improvements in connecting and securing door and other knobs or handles to their spindles." *Letters Patent sealed.*

SHILLITO. MOOR. 15th May 1863.

1220. BENJAMIN SHILLITO, Engineer, and DAVID MOOR, Merchant, both of No. 51, High Street, in the Borough of Kingston-upon-Hull, for an invention for—"Improvements in generating heat and motive-power." *Letters Patent sealed.*

FYFE. 15th May 1863.

1221. DOUGLAS MONRO FYFE, of Maidenhead, in the County of Berks, Adjutant of the 19 Regiment of Berks Volunteers, for an invention for—"Improvements in the brushes, instruments or apparatus employed for painting the centres and bulls'-eyes of military or other targets." *Provisional protection only.*

FYFE. 15th May 1863.

1222. DOUGLAS MONRO FYFE, of Maidenhead, in the County of Berks, Adjutant of the 19th Regiment of Berks Volunteers, for an invention for—"Improvements in the means or apparatus employed for raising, moving, transporting and refixing military or other targets or mantlets." *Letters Patent sealed.*

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CLARK.
15th May 1863.

1223. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in repeating fire-arms."—*A communication to him from abroad by Oliver Fisher Winchester, of the City and County of New Haven, in the State of Connecticut, United States of America.*
Letters Patent sealed.

MACMILLAN.
15th May 1863.

1224. ALEXANDER MACMILLAN, of No. 17, King's Road, Balls Pond Road, Islington, in the County of Middlesex, Tailor and Clothier, for an invention for—"Improvements in buttons and in fastening buttons to garments."
Letters Patent sealed.

MALLET.
15th May 1863.

1225. ROBERT TREFUSIS MALLET, of 11, Bridge Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the construction of piers, walls and other similar structures, and of landing stages, and in the connections therewith or attachments thereto."
Letters Patent sealed.

PATTERSON.
15th May 1863.

1226. JOHN PATTERSON, of Beverley, in the County of York, Engineer, for an invention for—"Improvements in machinery or apparatus for grinding, crushing, cleaning and hulling or shelling various kinds of farm or vegetable produce, also applicable to the crushing or grinding of minerals and other substances."
Letters Patent sealed.

PAPIN.
LINTZ.
LAVACHERIE.
15th May 1863.

1227. JOSEPH PAPIN, Shoe Maker, CHARLES LINTZ, and LEON LAVACHERIE, of Paris, Rue Feydeau, No. 28, in the Empire of France, for an invention for—"Improvements in the manufacture of boots and shoes." *Provisional protection only.*

WADDINGTON.
WADDINGTON.
WADDINGTON.
16th May 1863.

1228. RICHARD WADDINGTON, WILLIAM WADDINGTON, and THOMAS WADDINGTON, all of Thornton Road, Bradford, in the County of York, Machine Comb Makers, for an invention for—"Improvements in combs for combing wool by machinery." *Provisional protection only.*

BROWNE.
16th May 1863.

1229. BENJAMIN BROWNE, of 49, King William Street, in the City of London, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of elastic material."—*A communication to him from abroad by Gustave Mayer, of Rue des Tournelles, 7, Passy, Paris, in the French Empire.*
Letters Patent sealed.

HINKS.
16th May 1863.

1230. JAMES HINKS, of the firm of James Hinks and Son, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in lamps."
Letters Patent sealed.

TALBOT.
16th May 1863.

1231. ROBERT TALBOT, of Strand on the Green, Chiswick, in the County of Middlesex, for an invention for—"A folding rudder for steering barges in the river Thames or coastwise."
Letters Patent sealed.

BURNS.
16th May 1863.

1232. FREDERICK MAUN BURNS, of Chorlton-upon-Medlock, in the County of Lancaster, for an invention for—"Improvements in preventing the fouling of the bottoms and sides of ships and vessels, particularly applicable to ships and vessels constructed of or sheathed with iron." *Letters Patent sealed; no specification filed.*

CLARK.
16th May 1863.

1233. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in rotary engines."—*A communication to him from abroad by Adrien Jules Alexis Dumoulin, of 29, Boulevart St. Martin, Paris, Civil Engineer.* *Provisional protection only.*

NEWTON.
16th May 1863.

1234. JOHN TITUS NEWTON, of Ystalyfera, near Swansea, for an invention for—"Improvements in machinery for planishing and rolling sheet metal."
Letters Patent sealed.

GIBBS.
16th May 1863.

1235. JOSEPH GIBBS, of Abingdon Street, in the City of Westminster, for an invention for—"Improvements in preparing and spinning flax and other vegetable fibres and filaments, and in machinery employed therein." *Letters Patent sealed.*

WHITE.
16th May 1863.

1236. WILLIAM WHITE, of Earl Shilton, in the County of Leicester, Manager, for an invention for—"Improvements in machinery or apparatus for the manufacture of looped fabrics."
Letters Patent sealed.

STRETTON.
16th May 1863.

1237. THOMAS COX STRETTON, of the firm of T. C. Stretton and Company, of Old Basford, in the County of Nottingham, Lace Dressers, for an invention for—"Improvements in machinery or apparatus employed in the dressing of lace or other fabrics." *Provisional protection only.*

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WILSON. 16th May 1863.

1238. EDWARD BROWN WILSON, of 5, Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the manufacture of iron and other metals and in the apparatus employed therein, parts of which are applicable for other purposes where high temperatures are employed." *Letters Patent sealed.*

WHITEHEAD. 16th May 1863.

1239. JAMES WHITEHEAD, of Calverley, near Leeds, in the County of York, for an invention for—"Improvements in motive-power machinery especially adapted for raising and forcing water and other liquids or fluids, parts of said improvements being applicable to steam-engines and other machines fitted with pistons." *Letters Patent sealed.*

CHRISTMAS. 18th May 1863.

1240. ELEAZAR CHRISTMAS, of Watford, in the County of Hertford, Coach Builder, for an invention for—"Improvements in carriages for common roads." *Letters Patent sealed.*

WATSON. 18th May 1863.

1241. WILLIAM WATSON, of Clipstone Street, Fitzroy Square, in the County of Middlesex, Bread and Biscuit Baker, for an invention for—"Improvements in the manufacture of bread and in apparatus used for the same." *Letters Patent sealed.*

BENNETT. 18th May 1863.

1242. HENRY BENNETT, of Wombridge Iron Works, in the County of Salop, Iron Master, for an invention for—"Improved apparatus or mechanism to be used for facilitating the puddling of iron." *Letters Patent sealed.*

HEATHER. REDFERN. 18th May 1863.

1243. ALFRED HEATHER, of Devonshire House, Southsea, Hants, and JOHN REDFERN, of Cumberland Road, Southsea, Portsmouth, in the County of Hants, aforesaid, for an invention for—"Improvements in the construction of steam-boilers for marine, locomotive and stationary engines." *Letters Patent sealed.*

HEBBLEWHITE. 18th May 1863.

1244. BENJAMIN HEBBLEWHITE, of the Town of Kingston-upon-Hull, in the County of the same Town, Draper, for an invention for—"Improvements in machinery or mills for crushing or reducing oil cake, seeds and other substances."—*A communication to him from abroad by Samuel Hebblewhite, of Sydney, New South Wales.* *Provisional protection only.*

FENNER. HIGHT. 18th May 1863.

1245. REST FENNER, of Red Lion Court, in the City of London, Envelope Manufacturer, and WILLIAM HENRY HIGHT, of the same place, Engineer, for an invention for—"Improvements in envelope folding machines." *Letters Patent sealed.*

TOY. 18th May 1863.

1246. SAMUEL TOY, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in machinery for making screw rivets, nails or pins." *Provisional protection only.*

BEAUMONT. 18th May 1863.

1247. JOSEPH BEAUMONT, of Moate, in the County of Westmeath, Scribbling Engineer, for an invention for—"Improvements in condensing machines for working yarns of wool and other fibrous substances." *Letters Patent sealed.*

BARNARD. BISHOP. BARNARD. BARNARD. 19th May 1863.

1248. CHARLES BARNARD, JOHN BISHOP, CHARLES BARNARD, junior, and GODFREY BARNARD, of the Norfolk Iron Works, Norwich, Engineers, for an invention for—"Improvements in lawn mowing and rolling machines." *Letters Patent sealed.*

RHODES. 19th May 1863.

1249. STEPHEN RHODES, of Farnworth, Bolton, in the County of Lancaster, Builder, for an invention for—"Improvements in machinery for twisting and doubling cotton, hemp, flax and other like fibrous materials." *Letters Patent sealed.*

EDWARDS. 19th May 1863.

1250. JOHN EDWARDS, of 29, Basinghall Street, in the City of London, for an invention for—"Improvements in the permanent way of railways." *Provisional protection only.*

JOHNSON. 19th May 1863.

1251. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading firearms."—*A communication to him from abroad by Anthony Pollak, of Washington, in the United States of America.* *Letters Patent sealed.*

FENTON. 19th May 1863.

1252. FERRAR FENTON, of Mappleton, in the County of Derby, for an invention for—"Improvements in the treatment of certain vegetable fibres for the preparation of textile materials therefrom." *Letters Patent sealed.*

BUNTING. 19th May 1863.

1253. RICHARD BUNTING, of Sheffield, in the County of York, Cutler, for an invention for—"Improvements in frames, tips and bolsters used in cutlery, and in securing handles or scales therein or thereto." *Letters Patent sealed.*

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OLDING.
19th May 1863.

1254. HENRY JOHN OLDING, of Belvidere Road, Lambeth, in the County of Surrey, Engineer, for an invention for—"Improvements in treating flax and other fibrous plants in order to prepare the fibres thereof for spinning, and in apparatus employed therein." *Letters Patent sealed.*

KELLY.
19th May 1863.

1255. JOHN KELLY, of Brook Lodge, in the County of Roscommon, Ireland, Civil Engineer, for an invention for—"Improvements in the preparation or treatment of peat or turf and the manufacture thereof into charcoal and other fuel, drain pipes, building and other tiles, and in apparatus used therein." *Provisional protection only.*

PARKER.
19th May 1863.

1256. ABRAHAM PARKER, of Billericay, in the County of Essex, for an invention for—"An improved apparatus for saving from destruction by fire persons and property in houses, buildings and ships, and also for ventilating ships."—*A communication to him from abroad by James Partridge, of George and Bathurst Streets, in the City of Sydney, and Colony of New South Wales, Galvanized Iron Worker.* *Letters Patent sealed.*

CHANDOR.
19th May 1863.

1257. LASSLO CHANDOR, of the City of New York, United States of America, Gentleman, for an invention for—"An improved mechanical lamp." *Provisional protection only.*

SALT.
19th May 1863.

1258. THOMAS PARTRIDGE SALT, of Birmingham, in the County of Warwick, Surgical Instrument Maker, for an invention for—"Improvements in the manufacture of trusses." *Letters Patent sealed.*

CHANDOR.
19th May 1863.

1259. LASSLO CHANDOR, of New York City, in the United States of America, Gentleman, for an invention for—"An improvement in lamps." *Provisional protection only.*

SMITH.
19th May 1863.

1260. WILLIAM SMITH, of Mauchline, in the County of Ayr, North Britain, Gentleman, for an invention for—"Improvements in transferring plain or coloured prints or designs to wood or other surfaces." *Provisional protection only.*

WREN.
HOPKINSON.
20th May 1863.

1261. HENRY WREN, and JOHN HOPKINSON, of London Road Iron Works, in the City of Manchester, Lancaster, Mechanical Engineers, for an invention for—"Improvements in the construction of self-lubricating bearings for shafts and axles." *Letters Patent sealed.*

COIGNARD.
20th May 1863.

1262. JOSEPH COIGNARD, of Nantes, in the Empire of France, Watch Maker, for an invention for—"Certain improvements in sewing-machines." *Letters Patent sealed.*

LANG.
20th May 1863.

1263. WALTER JOHN COLIN LANG, of Kirkcudbright, Scotland, Gentleman, for an invention for—"Improvements in the manufacture of certain articles to be used for preserving life at sea and other purposes." *Provisional protection only.*

ADDINGTON.
20th May 1863.

1264. PAUL ADDINGTON, of Phipps Bridge, Merton, in the County of Surrey, Varnish Maker, for an invention for—"Improvements in the manufacture of varnishes." *Letters Patent sealed.*

JACKSON.
PEMBERTON.
20th May 1863.

1265. ROBERT RAYNSFORD JACKSON, of Blackburn, in the County of Lancaster, Cotton Spinner and Manufacturer, and WILLIAM PEMBERTON, of the same place, Loom Overlooker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

WILLIAMS.
NAYLOR.
20th May 1863.

1266. THOMAS WILLIAMS, of 232, Bolling Street, Bowling, in the Parish of Bradford, in the County of York, and ISAAC NAYLOR, of 13, Saint James Square, in Horton, in the said Parish of Bradford, Worsted Spinners and carrying on business in co-partnership, in Bowling and Bradford, aforesaid, for an invention for—"Improvements in paper spools or tubes used in spinning and doubling machines." *Provisional protection only.*

MARKALL.
20th May 1863.

1267. JOHN THURGOOD MARKALL, of Fieldgate Street, Whitechapel, London, for an invention for—"Improvements in machinery for working of wood." *Letters Patent sealed.*

CASSELL.
21st May 1863.

1268. JOHN CASSELL, of La Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in the treatment of mineral oils and hydrocarbons."—*A communication to him from abroad by Louis Martin, of Paris.* *Letters Patent sealed.*

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HARDING. 21st May 1863.

1269. GEORGE ROGERS HARDING, of Wandsworth, in the County of Surrey, Clerk, Vicar of Saint Anne's, Wandsworth, for an invention for—"Improvements in the means of transmitting power on railways worked by vacuum or the pressure of air, and in the apparatus to be employed for such purpose." *Letters Patent sealed.*

WALKER. 21st May 1863.

1270. WILLIAM WALKER, of the City of Manchester, Agent and Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

STEART. 21st May 1863.

1271. JAMES STEART, of 5, Saint James Road, Bermondsey, in the County of Surrey, Manufacturer, for an invention for—"Extracting the fibre from zostera marina and other aquatic vegetable productions." *Provisional protection only*

NUNN. 21st May 1863.

1272. WILLIAM NUNN, of 179, Saint George Street, in the Parish of Saint George's in the East, in the County of Middlesex, Manufacturer of Ships' and other Lamps and Signals, for an invention for—"Improvements in the construction of signal lanterns or lamps." *Letters Patent sealed.*

WARREN. 21st May 1863.

1273. FREDERIC PELHAM WARREN, of East Court, Cosham, in the County of Hants, Commander in the Royal Navy, for an invention for—"Improvements in attaching copper or other sheathing to iron vessels." *Letters Patent sealed.*

HUGHES. 21st May 1863.

1274. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in breech-loading fire-arms and in cartridges connected with the same."—*A communication to him from abroad by Rudolph Mayer, Gentleman, of 13, Rue Gaillon, Paris, in the Empire of France.* *Provisional protection only.*

AMIES. 21st May 1863.

1275. NATHANIEL JONES AMIES, of Manchester, in the County of Lancaster, Smallware Manufacturer, for an invention for—"Certain improvements in the manufacture of 'elastic webbing.'" *Letters Patent sealed.*

THOMALLEY. 21st May 1863.

1276. ABRAHAM THOMALLEY, of Burgh le Marsh, in the County of Lincoln, Brick Manufacturer, for an invention for—"Improvements in brick kilns." *Provisional protection only.*

CLAPP. 21st May 1863.

1277. WILLIAM HENRY CLAPP, of North Place, Ball's Pond Road, in the County of Middlesex, for an invention for—"An improved rail or holder for coats or other articles." *Letters Patent sealed.*

SONSTADT. 21st May 1863.

1278. EDWARD SONSTADT, of Loughborough, in the County of Leicester, for an invention for—"Improvements in the manufacture and purification of the metal magnesium." *Letters Patent sealed.*

FAWCETT. 21st May 1863.

1279. JOHN FAWCETT, of Huddersfield, in the County of York, Cattle Food Manufacturer, for an invention for—"Improvements in the preparation of food for cattle, horses and other animals." *Letters Patent sealed.*

GOODMAN. 21st May 1863.

1280. JOSEPH GOODMAN, of Blackfriars Road, in the County of Surrey, Mechanician, for an invention for—"Improvements in velocipedes and in the construction of wheels for the same and other carriages." *Letters Patent sealed.*

BROOMAN 21st May 1863.

1281. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in breech-loading ordnance and breech-loading and other small arms."—*A communication to him from abroad by Lewis Wells Broadwell, residing at Saint Petersburg, Russia.* *Letters Patent sealed.*

SNELL. 22nd May 1863.

1282. WILLIAM SNELL, of 16, Clement's Inn, in the City of Westminster, for an invention for—"Improvements in butt hinges."—*A communication to him from abroad by William Henry Hayes, of New York City, United States of America.* *Complete specification; Letters Patent sealed.*

MASCHWITZ. 22nd May 1863.

1283. CHARLES MASCHWITZ, the younger, of Birmingham, in the County of Warwick, Merchant, for an invention for—"Improvements in stoppers or bungs for closing or stopping bottles, jars and other vessels and the muzzles of rifles, and for other like purposes."—*A communication to him from abroad by Ferdinand Krauskopf, of No. 10, Peterhoff Prospect, St. Petersburg, in the Empire of Russia.* *Provisional protection only.*

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BLAKELY.
22nd May 1863.

1284. THEOPHILUS ALEXANDER BLAKELY, of Montpelier Square, in the County of Middlesex, late Captain Royal Artillery, for an invention for—"Improvements in ordnance." *Letters Patent sealed.*

HABERSHON.
HABERSHON.
HABERSHON.
22nd May 1863.

1285. JOSEPH JONES HABERSHON, JOHN MATTHEW HABERSHON, and MATTHEW HENRY HABERSHON, all of Rotherham, in the County of York, Rolling Mill Proprietors, for an invention for—"Improvements in machinery for rolling, polishing, straightening and tapering round rods or bars of iron, steel and other metals." *Provisional protection only.*

BLAKELY.
22nd May 1863.

1286. THEOPHILUS ALEXANDER BLAKELY, of Montpelier Square, in the County of Middlesex, late Captain Royal Artillery, for an invention for—"A new method of rifling guns and of forming projectiles to correspond therewith." *Letters Patent sealed.*

STEVENS.
22nd May 1863.

1287. GEORGE STEVENS, of Victoria Terrace, Camberwell, in the County of Surrey, for an invention for—"Improvements in coke ovens, and in building and heating ovens or retorts for generating coal gas connected therewith." *Letters Patent sealed.*

NEWTON.
22nd May 1863.

1288. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of waterproof fabrics."—*A communication to him from abroad by John Foster Greene, of Warwick, Rhode Island, in the United States of America.* *Letters Patent sealed.*

NEWTON.
22nd May 1863.

1289. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for the manufacture of waterproof fabrics."—*A communication to him from abroad by John Foster Greene, of Warwick, Rhode Island, United States of America.* *Letters Patent sealed.*

HIGGINS.
WHITWORTH.
22nd May 1863.

1290. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for roving, spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

HOFMANN.
22nd May 1863.

1291. AUGUSTUS WILLIAM HOFMANN, of Fitzroy Square, in the County of Middlesex, F.R.S., Professor in the Royal College of Chemistry, for an invention for —"Improvements in preparing coloring matters for dyeing and printing." *Letters Patent sealed.*

STURGEON.
23rd May 1863.

1292. JOHN STURGEON, of Leeds, in the County of York, Consulting Engineer, for an invention for—"Improvements in steam hammers." *Letters Patent sealed.*

BARLOW.
ASHWORTH.
NEWHOUSE.
HAMILTON.
HOPE.
23rd May 1863.

1293. EDWARD BARLOW, of Bolton, in the County of Lancaster, Machine Maker, JOHN ASHWORTH, junior, of Turton, near Bolton, aforesaid, Cotton Spinner, JAMES NEWHOUSE, of Farnworth, near Bolton, aforesaid, Manager, and FRANCIS HAMILTON, Foreman, and WILLIAM HOPE, Carder, both of Bolton, aforesaid, for an invention for—"Improvements in lap machines for preparing cotton and other fibrous substances." *Letters Patent sealed.*

PICKERING.
23rd May 1863.

1294. JOHN ALEXANDER PICKERING, of Heath Cottage, Oatlands Park, in the County of Surrey, Professor of Music, for an invention for—"Improvements in covers or capsules for bottles, jars and similar vessels." *Provisional protection only.*

CORMACK.
23rd May 1863.

1295. WILLIAM CORMACK, of the City of Manchester, in the County of Lancaster, Chemist, for an invention for—"Improvements in the distillation of coal tar, tar oil, resin, resin oils, all hydrocarbons, petroleum or other mineral or vegetable oils and spirits derived therefrom." *Letters Patent sealed.*

ROSSER.
JENNINGS.
23rd May 1863.

1296. SAMUEL EGAN ROSSER, of Northumberland Street, Strand, in the City of Westminster, Warming and Ventilating Engineer, and JOSIAH GEORGE JENNINGS, of Palace Road, Lambeth, in the County of Surrey, Sanitary Engineer, for an invention for—"Improvements in chimneys, fire places, stoves and flues for warming and ventilating apartments." *Letters Patent sealed.*

BICKFORD.
SMITH.
23rd May 1863.

1297. JOHN SOLOMON BICKFORD, and GEORGE SMITH, both of Tuckingmill, Camborne, in the County of Cornwall, Safety Fuze Manufacturers, for an invention for—"A certain new manufacture for firing explosive compounds." *Letters Patent sealed.*

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HOEY. 23rd May 1863.

1298. WILLIAM HOEY, of Great George Street, Bermondsey, in the County of Surrey, Tanner and Currier, for an invention for—"The preparation of a fluid for renewing the surface of japanned and enamelled leathers and cloths." *Provisional protection only.*

HOPKINS. 23rd May 1863.

1299. JOHN HOPKINS, of Chapel Street, New Basford, in the County of Nottingham, Lace Maker, for an invention for—"Improvements in points and in crossings used on railways and on tramways." *Provisional protection only.*

POTTS. KEY. 23rd May 1863.

1300. FERDINAND POTTS, Tube Manufacturer, of Birmingham, in the County of Warwick, and JOHN KEY, of the firm of Key, Hoskins & Co., Brass and Iron Bedstead Manufacturers, also of Birmingham, aforesaid, for an invention for—"Improvements in the manufacture of certain descriptions of iron tubing, and in the means of producing and applying an ornamental case to the same, which said means are also applicable to the production of ornaments in metal for other purposes." *Letters Patent sealed.*

BROOMAN. 23rd May 1863.

1301. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in indicating the position of trains upon railways and in apparatus employed therein."—*A communication to him from abroad by Albert Mayrhofer, Adolf Stepski and Martin Crachi, all of Vienna, Austria.* *Letters Patent sealed.*

BROOMAN. 23rd May 1863.

1302. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of bells and of resisting and non-cutting tools."—*A communication to him from abroad by Henri Micolon, of Paris, France.* *Provisional protection only.*

BROOMAN. 23rd May 1863.

1303. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in safety garments."—*A communication to him from abroad by André Selingue, of Hovre, France.* *Letters Patent sealed.*

KINGSBURY. 23rd May 1863.

1304. FREDERICK KINGSBURY, of Cecil Street, in the City of Westminster, Professor of Singing, for an invention for—"Improvements in the construction of orchestras." *Letters Patent sealed.*

SMITH. 23rd May 1863.

1305. GEORGE SMITH, of Fenchurch Street, in the City of London, Merchant, for an invention for—"Improvements in lamps for burning hydro-carbon oils."—*A communication to him from abroad by Louis Martin, of Paris, France.* *Letters Patent sealed.*

HESFORD. 25th May 1863.

1306. JAMES HESFORD, of the Cunliffe Street Works, Bolton, in the County of Lancaster, Millwright and Engineer, for an invention for—"Improvements in machinery and apparatus for stretching and drying cotton and other fabrics or materials." *Letters Patent sealed.*

MUIR. 25th May 1863.

1307. WILLIAM MUIR, of the Britannia Works, in the City of Manchester, Engineer and Machinist, for an invention for—"Improvements in machinery for cutting sugar and for assorting the lumps when cut." *Letters Patent sealed.*

HOWELL. 25th May 1863.

1308. GEORGE HOWELL, of the Old Kent Road, in the County of Surrey, Stationer, for an invention for—"A new double action self-feeding stamping and printing machine." *Provisional protection only.*

BONNEVILLE. 25th May 1863.

1309. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in the construction of carriages."—*A communication from Charles William Hine Sargent, Manufacturer, a person now residing at 24, Rue du Mont Thabor, Paris, in the Empire of France.* *Letters Patent sealed.*

LEPROVOST. 25th May 1863.

1310. PAUL LEPROVOST, of London St., Paris, in the Empire of France, Civil Engineer, for an invention for—"Certain improvements in carriages and vehicles for railways and other roads." *Letters Patent sealed.*

HUNT. 25th May 1863.

1311. EDMUND HUNT, of Glasgow, in the County of Lanark, North Britain, Patent Agent, for an invention for—"Improvements in posts or pillars for fences and gates."—*A communication to him from abroad by David Middleton, residing at Christ Church, Canterbury, New Zealand.* *Letters Patent sealed.*

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KÖTTGEN. 25th May 1863.

1312. GUSTAV KÖTTGEN, of Barmen, in the Kingdom of Prussia, Manufacturer, for an invention for—"An improved binding to be used for trimming woollen cloth garments." *Letters Patent sealed.*

GIRARD. 25th May 1863.

1313. HIPPOLYTE BENIGNE GIRARD, of No. 11, Rue du Conservatoire, in the City of Paris, Chemist, residing at present with Mr. Sandrier, Banker, of Paris, aforesaid, for an invention for—"Improvements in the heating of every industrial and private apparatus by means of the oxygen and hydrogen gases combined and obtained from the decomposition of water." *Letters Patent sealed.*

SPURRIER. 25th May 1863.

1314. THOMAS SPURRIER, of Moseley, in the County of Worcester, Gentleman, for an invention for—"Improvements in the manufacture of ornamental metal cylinders. *Provisional protection only.*

HILLIAR. 25th May 1863.

1315. JOHN HILLIAR, of Cheapside, in the City of London, Manufacturer, for an invention for—"Improvements in the construction of the frames, sashes, shutters, blinds and ventilators for windows or other openings, part of which improvements are also applicable to other constructive purposes." *Letters Patent sealed.*

HARE. 25th May 1863.

1316. CHARLES HARE, of the City of Norwich, Chair Manufacturer, for an invention for—"Improvements in reclining and easy chairs." *Provisional protection only.*

HAYWARD. 25th May 1863.

1317. RICHARD HAYWARD, of Wapping, in the County of Middlesex, Wine Cooper, for an invention for—"Improvements in apparatus for bottling liquids or for drawing or letting off at the same time, liquids from several different casks or vessels." *Provisional protection only.*

ROBERTS. 25th May 1863.

1318. MARTYN JOHN ROBERTS, of Pendarren, near Crickhowell, in the County of Brecknock, Esquire, for an invention for—"Improvements in means of and apparatus for preparing, spinning, twisting and doubling wool, cotton and other fibrous substances, and in lubricating the spindles and other parts of machinery used in these and other operations." *Letters Patent sealed.*

BURTON. RHODES. SEANOR. SCRUTON. 25th May 1863.

1319. JOHN WATSON BURTON, SAMUEL GIBSON RHODES, SAMUEL OXLEY SEANOR, all of Leeds, in the County of York, and WILLIAM SCRUTON, of Liverpool, in the County of Lancaster, for an invention for—"An improved machine or apparatus for getting coal or other minerals." *Provisional protection only.*

CLARK. 25th May 1863.

1320. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for ruling paper and other materials, either alone or in combination with typographical or lithographical printing."—*A communication to him from abroad by Bonaventure Tournier, of* 11, *Rue Méchain, Paris, in the Empire of France, Printer.* *Letters Patent sealed.*

HALEY. 26th May 1863.

1321. ABRAHAM HALEY, of Frome, in the County of Somerset, Machinist, for an invention for—"Improvements in jacquard looms." *Letters Patent sealed.*

MUNRO. SCOTT. 26th May 1863.

1322. JAMES MUNRO, of Tillanburn, and ROBERT SCOTT, of Cambusnethan, both places being in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements in apparatus for boring, mining and excavating or cutting, in motive-power engines, and in pressure gauges." *Letters Patent sealed.*

DUTTON. 26th May 1863.

1323. EDWARD KENWORTHY DUTTON, of Stretford, in the County of Lancaster, Mechanical Engineer, for an invention for—"Certain improvements in apparatus called 'gins' for cleansing seed cotton." *Provisional protection only.*

HENRY. 26th May 1863.

1324. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for raising, forcing and moving fluids."—*A communication to him from abroad by Louis Coignard, of* 33, *Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

BUCKINGHAM. 26th May 1863.

1325. JAMES BUCKINGHAM, of Launceston, in the County of Cornwall, for an invention for—"Improvements in ploughs." *Provisional protection only.*

KITSON. KITSON. 26th May 1863.

1326. FREDERICK WILLIAM KITSON, and JAMES KITSON, the younger, of Leeds, in the County of York, Iron Masters, for an invention for—"Improvements in the manufacture of the tyres for railway wheels and in the means of securing the tyres to the wheels." *Letters Patent sealed.*

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NEWTON. 26th May 1863.

1327. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in machines for separating the fibre from the flesh of plants."—*A communication to him from abroad by Eduardo Juanes y Patrullo, of New York City, United States of America.* *Letters Patent sealed.*

HERNANDEZ. CRESPY. 27th May 1863.

1328. ANTOINE PASCAL HERNANDEZ, and PIERRE BÉLISAIRE CRESPY, of Bordeaux, in the Empire of France, for an invention for—"Improvements in the manufacture of soap." *Provisional protection only.*

CLARK. 27th May 1863.

1329. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in offensive and defensive arms."—*A communication to him from abroad by Celestin Dumonthier, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

BASTOW. 27th May 1863.

1330. ARTHUR BASTOW, of Bradford, in the County of York, Manufacturer, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

COULTHARD. 27th May 1863.

1331. HIRAM CRAVEN COULTHARD, of Park Iron Works, Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in blast engines." *Letters Patent sealed.*

KENNARD. 27th May 1863.

1332. HOWARD JOHN KENNARD, of No. 36, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the construction of wrought iron cylinders for piers or piles to bridges, viaducts, or for other foundations or structures where the sinking of cylinders is required." *Letters Patent sealed.*

GAMMON. 27th May 1863.

1333. CHARLES GAMMON, of No. 9, Cloak Lane, in the City of London, Gentleman, for an invention for—"An improved spring fastening." *Letters Patent sealed.*

PALLISER. 27th May 1863.

1334. WILLIAM PALLISER, Captain of Her Majesty's 18th Regiment of Hussars, of the City of Dublin, for an invention for—"Improvements in projectiles for ordnance." *Letters Patent sealed.*

PILTZ. 28th May 1863.

1335. FRANCIS ROBERT PILTZ, of Frederick Street, Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in the mode of producing ornamental surfaces applicable to the general purposes of decoration." *Letters Patent sealed.*

ELLIS. 28th May 1863.

1336. WILLIAM IRLAM ELLIS, of Vulcan Foundry, near Warrington, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

BOUTET. 28th May 1863.

1337. CHARLES THOMAS BOUTET, of Quai Mariemont, Brussels, Engineer, for an invention for—"A new or improved instrument for measuring distances and altitudes." *Provisional protection only.*

GORE. 28th May 1863.

1338. GEORGE GORE, of Birmingham, in the County of Warwick, Consulting Chemist, for an invention for—"Improvements in gas-burners and in gas furnaces." *Letters Patent sealed.*

LAEDERICH. 28th May 1863.

1339. CHARLES EUGENE LAEDERICH, of Paris, France, Gentleman, for an invention for—"Improvements in watches." *Letters Patent sealed.*

CARTWRIGHT. 28th May 1863.

1340. HENRY CARTWRIGHT, of the Dean Broseley, in the County of Salop, Gentleman, for an invention for—"Improvements in apparatus for steering vessels." *Letters Patent sealed.*

BAXTER. 28th May 1863.

1341. CHARLES FRANCIS BAXTER, of Boston, in the County of Suffolk, and State of Massachusetts, of the United States of America, for an invention for—"A new and useful hollow elastic stopper for bottles, jugs and other similar vessels." *Complete specification; Letters Patent sealed.*

RICHARDSON. IRVINE. 28th May 1863.

1342. THOMAS RICHARDSON, of the Town and County of Newcastle-upon-Tyne, Chemist, and ROBERT IRVINE, of Musselburgh, in the County of Mid-Lothian, North Britain, Manufacturing Chemist, for an invention for—"Improvements in treating the waste liquor obtained in the preparation of esparto grass." *Letters Patent sealed.*

OSBOURN. 28th May 1863.

1343. FREDERICK OSBOURN, of Peckham, in the County of Surrey, Tailor, for an invention for—"Improved apparatus for pressing, smoothing and finishing garments or parts of garments." *Letters Patent sealed.*

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WHITE. 28th May 1863.	**1344.** HENRY THOMAS WHITE, of Piccadilly, in the County of Middlesex, Accoutrement Maker, for an invention for—"Improvements in hats, caps and other coverings for the head." *Provisional protection only.*
JARVIS. 28th May 1863.	**1345.** THOMAS JARVIS, of Earl's Court, in the County of Middlesex, Chemist, for an invention for—"Improvements in obtaining vegetable extracts and in apparatus employed therein." *Provisional protection only.*
BROOMAN. 28th May 1863.	**1346.** RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in paddle wheels."—*A communication to him from abroad by Gustave Sahler, of Montbéliard, France.* *Letters Patent sealed.*
NEEDHAM. KITE. 28th May 1863.	**1347.** WILLIAM NEEDHAM, and JAMES KITE, of the Patent Filter Press Works, Vauxhall, in the County of Surrey, Manufacturers, for an invention for—"Improvements in expressing liquid and moisture from substances, and in separating the liquid from the solid portions thereof, applicable also to the filtration of liquids." *Provisional protection only.*
IRONMONGER. 29th May 1863.	**1348.** ELI IRONMONGER, of No. 1, Friar Gate, Derby, in the County of Derby, Auctioneer and Upholsterer and Furniture Dealer, for an invention for—"An improved loose clip and socket joint applicable to bedsteads, sofas, chairs and other articles of furniture and of fencing." *Letters Patent sealed and specification filed by order.*
ABADIE. 29th May 1863.	**1349.** ALFRED ABADIE, of Fecamp, in the Empire of France, Manufacturer, for an invention for—"Improvements in railway breaks." *Letters Patent sealed.*
LOEDER. 29th May 1863.	**1350.** WILLIAM LOEDER, of New Broad Street, in the City of London, Merchant, for an invention for—"Improvements in rails for railways."—*A communication to him from abroad by Gabriel Dümler, of Namur, Belgium, Engineer.* *Letters Patent sealed.*
PÔTEL. 29th May 1863.	**1351.** JEROME JEAN PÔTEL, of Saint Quentin, in the Empire of France, Engineer, for an invention for—"An improved method of accelerating the draft in furnaces and fire-places." *Letters Patent sealed.*
PIERCE. 29th May 1863.	**1352.** GEORGE HENRY PIERCE, of Plymouth, in the County of Devon, Gentleman, for an invention for—"Improved apparatus for heating buildings by means of hot water." *Letters Patent sealed.*
BARKER. 29th May 1863.	**1353.** ROBERT BARKER, of Grafton Road, Upper Holloway, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of matches usually termed vesuvians." *Provisional protection only.*
GREEN. 29th May 1863.	**1354.** WILLIAM GREEN, of Margaret's Place, Old Ford Road, in the County of Middlesex, for an invention for—"Improvements in the means or method of producing black coloring matters or pigments." *Letters Patent sealed.*
JOHNSON. 29th May 1863.	**1355.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture or preparation of lubricating material."—*A communication to him from abroad by François Janssens, of Paris, in the Empire of France.* *Provisional protection only.*
PATUREAU. 29th May 1863.	**1356.** FRANÇOIS PATUREAU, of Paris, in the Empire of France, Manufacturer, for an invention for—"Improvements in the manufacture of card board or paper boxes or receptacles." *Letters Patent sealed.*
HUGHES. 30th May 1863.	**1357.** EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in apparatus for the transmission of motive-power."—*A communication to him from abroad by Thomas Luders, Engineer, of No. 13, Rue Gaillon, Paris, in the Empire of France.* *Provisional protection only.*
MOSMAN. 30th May 1863.	**1358.** EDWARD PAYSON MOSMAN, of Springfield, Massachusetts, in the United States of America, now residing at Enfield Highway, in the County of Middlesex, Engineer, for an invention for—"Improvements in obtaining and applying motive-power." *Provisional protection only.*
HEARD. 30th May 1863.	**1359.** JOHN HEARD, of Crediton, in the County of Devon, Engineer, for an invention for—"Improvements in apparatus for distributing manure." *Provisional protection only.*

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BAKER. 30th May 1863.

1360. VALENTINE BAKER, Lieutenant Colonel of Her Majesty's 10th Regiment of Hussars, at present stationed in Dublin, for an invention for—"Improvements in ordnance." *Letters Patent sealed.*

BATES. JARDINE. 30th May 1863.

1361. STEPHEN BATES, and JOHN JARDINE, both of Radford, in the County of Nottingham, Bobbin and Carriage Manufacturers, for an invention for—"Improvements in carriages used in machines employed in the manufacture of lace or other fabrics." *Provisional protection only.*

CLARK. 30th May 1863.

1362. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of manure."—*A communication to him from abroad by Alfred François Mosselman, of 29, Boulevart St. Martin, Paris, Manager of the West of France Lime Burning Company.* *Letters Patent sealed.*

HENSON. 1st June 1863.

1363. JAMES HENSON, of Parliament Street, Westminster, Civil Engineer, for an invention for—"Improvements in the construction of railway carriages." *Provisional protection only.*

CHALMERS. 1st June 1863.

1364. JAMES CHALMERS, of 8, Knight's Place, Vauxhall, for an invention for—"Improvements in armour for forts and floating batteries." *Letters Patent sealed.*

CLARK. 1st June 1863.

1365. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for printing fabrics, papers and other surfaces in colors."—*A communication to him from abroad by Joseph Saroglia, of 29, Boulevart St. Martin, Paris, and of 14, Rue Ferrandière, Lyons, both in the Empire of France.* *Letters Patent sealed.*

SMITH. 1st June 1863.

1366. FREDERICK WARWICK SMITH, of 180, Upper Thames Street, in the City of London, Merchant, for an invention for—"An improved apparatus for conveying goods either in bulk or otherwise, whether to or from the warehouse or vessel, having an inclined vertical or horizontal movement, to be worked either by pressure of air or by vacuum and atmospheric pressure." *Provisional protection only.*

CHICHESTER. 1st June 1863.

1367. LEWIS SCUDDER CHICHESTER, of Brooklyn, in the State of New York, United States of America, for an invention for—"Improvements in means for drying grain." *Letters Patent sealed.*

DAVEY. 1st June 1863.

1368. JOHN DAVEY, of Crafthole, in the County of Cornwall, Agricultural Implement Manufacturer, for an invention for—"Improvements in horse rakes." *Provisional protection only.*

NEWTON. 1st June 1863.

1369. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of marline spike."—*A communication to him from abroad by Albin Warth, of Stapleton, in the County of Richmond, State of New York, United States of America.* *Letters Patent sealed.*

BELCHER. 1st June 1863.

1370. CHARLES BELCHER, of Little Coxwell, in the County of Berks, Farmer, for an invention for—"Improvements in cutting and transplanting turf and in apparatus to be employed therein, which apparatus is also applicable to the extraction of weeds and to the planting of seeds, roots, sets or plants." *Provisional protection only.*

COULTHARD. 1st June 1863.

1371. HIRAM CRAVEN COULTHARD, of "Park Iron Works," Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in packing for the glands of piston rods and other moving mechanism where it is necessary to prevent the passage of steam or other fluids." *Letters Patent sealed.*

MELLARD. 2nd June 1863.

1372. JAMES MELLARD, of Rugeley, in the County of Staffordshire, Agricultural Implement Manufacturer, for an invention for—"Improvements in double moulding or ridging ploughs." *Provisional protection only.*

ILLINGWORTH. 2nd June 1863.

1373. ABRAHAM ILLINGWORTH, of Halifax, in the County of York, Boot and Shoe Maker, for an invention for—"Improvements in boots and shoes or similar coverings for the feet, and in the manufacture thereof." *Letters Patent sealed.*

BRIERLEY. 2nd June 1863.

1374. JOHN HENRY BRIERLEY, of Beech Hill Mills, Halifax, and 58, Aldermanbury, London, for an invention for—"The application of leather in the manufacture of gentlemen's scarfs and ties." *Provisional protection only.*

COTTAM. 2nd June 1863.

1375. GEORGE HALLEN COTTAM, of the St. Pancras Iron Works, Old St. Pancras Road, in the County of Middlesex, for an invention for—"Improvements in bricks suitable for being used for paving stables and other places." *Letters Patent sealed.*

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WILSON. COWPER. 2nd June 1863.

1376. DAVID WILSON, of Wandsworth Common, in the County of Surrey, and EDWARD ALFRED COWPER, of No. 35A, Great George Street, Westminster, for an invention for—"Improvements in presses." *Letters Patent sealed.*

BARRETT. EXALL. ANDREWES. BARRETT. 2nd June 1863.

1377. GEORGE ALLAM BARRETT, WILLIAM EXALL, CHARLES JAMES ANDREWES, and ALFRED BARRETT, all of Reading, in the County of Berks, Engineers, for an invention for—"Improvements in valves and apparatus for regulating the speed of steam-engines."—*Partly communicated to them from abroad by Frederic Perry, of Newark, New Jersey, United States of America, and partly invented by themselves.* *Letters Patent sealed.*

PAGE. 2nd June 1863.

1378. THOMAS PAGE, of Adelphi Terrace, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in shoeing horses." *Provisional protection only.*

JARRY. 2nd June 1863.

1379. ETIENNE JOSEPH JARRY, of 29, Boulevart St. Martin, Paris, Merchant, for an invention for—"Improvements in machinery to be worked by steam or other power for clearing and ploughing land." *Letters Patent sealed.*

LÉTANG. 2nd June 1863.

1380. EDME HENRY LÉTANG, of 12, Rue du Chemin de Reuilly, Paris, in the Empire of France, for an invention for—"An improved ruling and printing machine to be used either combined or separately." *Provisional protection only.*

CRAWFORD. 2nd June 1863.

1381. ROBERT CRAWFORD, of Beith, in the County of Ayr, North Britain, Merchant, for an invention for—"Improvements in jacquard machines used for weaving ornamental fabrics. *Provisional protection only.*

AGNEW. 2nd June 1863.

1382. THOMAS AGNEW, junior, of Manchester, in the County of Lancaster, Publisher, for an invention for—"Certain improvements in apparatus for coating or covering moulded or other surfaces with certain composition or material." *Provisional protection only.*

GLEAVE. YOUNG. 2nd June 1863.

1383. WILLIAM GLEAVE, and THOMAS YOUNG, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Certain improvements in apparatus for feeding or supplying water to steam-boilers." *Provisional protection only.*

TRAVIS. 3rd June 1863.

1384. JOHN TRAVIS, of Luzley Brook, in the Township of Royton, in the County of Lancaster, Gentleman, for an invention for—"An improved method of preventing incrustation of earthy matter in steam-boilers, steam generators and fuel economizers." *Letters Patent sealed.*

LOCKE. 3rd June 1863.

1385. EDWARD AUGUSTUS LOCKE, of Boston, in the County of Suffolk, and State of Massachusetts, in the United States of America, for an invention for—"Improved means of securing identifying labels or tags to bales of fibrous material."—*The result partly of a communication made to him by Henry Ware Goodrich, a person resident in Chelsea, in the aforesaid County, and partly of invention and discovery made by himself.* *Provisional protection only.*

CLARIDGE. 3rd June 1863.

1386. THOMAS CLARIDGE, of the firm of Claridge, North and Company, of Bilston, in the County of Stafford, Manufacturers, for an invention for—"An improvement or improvements in the manufacture of spur wheels used in the construction of mill and forge gearing and for other like purposes." *Provisional protection only.*

DAVIES. 3rd June 1863.

1387. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in machines for 'ginning' cotton."—*A communication to him from abroad by Jules Alfred Chaufourier, of Paris, in the Empire of France.* *Letters Patent sealed.*

LEE. WINTER. 3rd June 1863.

1388. WELLINGTON LEE, of New York, now of No. 23, Sumner Place, Onslow Square, in the County of Middlesex, and JOHN GANO WINTER, of New York, now of No. 73, Great Suffolk Street, in the County of Surrey, for an invention for—"Improvements in steam fire-engines."—*A communication to them from abroad by Joseph Garnett Larned, of the City, County and State of New York, United States of America.* *Provisional protection only.*

BARFF. 3rd June 1863.

1389. FREDERICK SETTLE BARFF, of the City and County of Dublin, for an invention for—"An improved means of protecting, preserving and hardening surfaces of brick, cement, stone, stucco and other analogous substances, which invention is also applicable to the preservation of timber." *Letters Patent sealed.*

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McCOMB. 3rd June 1863.

1390. JAMES JENNINGS McCOMB, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the construction of presses for forming bales of cotton and other materials, and in the construction of fastenings for and means for applying bands to such bales."—*The result partly of a communication from abroad by David McComb, of Tennessee, North America, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

PORTLOCK. 3rd June 1863.

1391. JOHN PORTLOCK, of Hampstead Road, in the County of Middlesex, Gun Maker, for an invention for—"An improved alarum apparatus." *Provisional protection only.*

MAURICE. 3rd June 1863.

1392. JOSEPH MAURICE, of 3, Langham Place, Regent Street, Dentist, for an invention for—"Improvements in rulers or instruments for ruling, and in the mode of constructing them." *Provisional protection only.*

BLAKE. LEE. DUTTON. 4th June 1863.

1393. STEPHEN BLAKE, and THOMAS LEE, of Chester, in the County of Chester, Millers, and ROBERT DUTTON, also of Chester, aforesaid, Millwright, for an invention for—"Improvements in the construction of flour and meal mills." *Letters Patent sealed.*

RIGBY. 4th June 1863.

1394. HUGH RIGBY, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-boilers and furnaces for the consumption of smoke." *Letters Patent sealed.*

DE WAILLY. 4th June 1863.

1395. MME. VEUVE LEON DE WAILLY, of Paris, in the Empire of France (without profession), for an invention for—"An improved method of preserving carpets from the effect of dust." *Provisional protection only.*

POLLACK. 4th June 1863.

1396. HEINRICH POLLACK, of the firm Heinrich Pollack & Co., at Hamburgh, for an invention for—"An improvement in the manufacture of scarlet, brown and orange colors." *Provisional protection only.*

NEWTON. 4th June 1863.

1397. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of casks, barrels, kegs and other analogous articles."—*A communication to him from abroad by John Connolly, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

GUILLAUME. 5th June 1863.

1398. SAMUEL ST. BARBE GUILLAUME, of No. 81, Morland Place, in the Town and County of the Town of Southampton, for an invention for—"Improvements in bricks and in apparatus to be used in manufacturing the same, and in brickwork built therewith." *Provisional protection only.*

CALVERT. 5th June 1863.

1399. FRANCIS ALTON CALVERT, of the City of Manchester, Engineer, for an invention for—"Certain improvements in steam-engines, steam-boilers and steam heating apparatus." *Letters Patent sealed.*

SIEVIER. 5th June 1863.

1400. ROBERT WILLIAM SIEVIER, of Guilford Street, Russell Square, in the County of Middlesex, for an invention for—"Improvements in jacquard machines."—*A communication to him from abroad by Edouard Maximilien Augustin Rigo, resident at Neuilly, near Paris, and Charles Grognet, resident at Paris, both in the Empire of France.* *Provisional protection only.*

DE GROMARD. 5th June 1863.

1401. ARTHUR QUENTIN DE GROMARD, of Paris, France, Gentleman, for an invention for—"Improvements in musical instruments." *Letters Patent sealed.*

BROOMAN. 5th June 1863.

1402. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in treating liquorice root to obtain liquid and solid extracts therefrom."—*A communication to him from abroad by Frumence Nicolas Frezon, of Paris, France.* *Letters Patent sealed.*

GRAY. 5th June 1863.

1403. THOMAS GRAY, of Lower Mitcham, in the County of Surrey, Bleacher, for an invention for—"Improvements in treating flax, hemp and other vegetable fibrous substances in order to bleach and separate the fibres." *Letters Patent sealed.*

SEAMAN. 5th June 1863.

1404. JOSEPH SEAMAN, of Lowesmoor Works, Worcester, Agricultural Implement Manufacturer, for an invention for—"Improvements in implements to be used in the cultivation of the soil." *Letters Patent sealed.*

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CLARK. 5th June 1863.

1405. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the distillation and separation of hydrocarburets and their derivatives, and in apparatus for the same."—*A communication to him from abroad by Jean Théodore Coupier, of 29, Boulevart St. Martin, Paris, Manufacturer.* *Letters Patent sealed.*

JOHNSON. 5th June 1863.

1406. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in smoothing irons."—*A communication to him from abroad by the Society Jean Charles and Company, of Marseilles, in the Empire of France.* *Letters Patent sealed.*

BROWN. 8th June 1863.

1407. WILLIAM ARMITAGE BROWN, of 3, Victoria Terrace, Hawks Lane, in the City of Canterbury, in the County of Kent, Civil Engineer, for an invention for—"An indicator for railway trains." *Letters Patent sealed.*

WALLIS. 8th June 1863.

1408. RICHARD WALLIS, of Basingstoke, in the County of Hants, Corn and Coal Merchant, for an invention for—"Improvements in apparatus for loading and unloading vessels, and for elevating and otherwise conveying sacks, casks and other packages, parcels or objects from one locality to another." *Provisional protection only.*

HOLLINGSWORTH. 8th June 1863.

1409. ALFRED JAMES HOLLINGSWORTH, of No. 9, Oxford Street, Southampton, in the County of Hampshire, for an invention for—"A new or improved spirit-compass with screw lever." *Letters Patent sealed.*

NEWCOMEN. 8th June 1863.

1410. CHARLES EDWARD NEWCOMEN, of 20, Ovington Square, Brompton, in the County of Middlesex, for an invention for—"Improvements in the treatment of peat and other substances containing moisture." *Letters Patent sealed.*

HOGG. 8th June 1863.

1411. JAMES HOGG, junior, of No. 49, Fleet Street, in the City of London, for an invention for—"Improvements in the manufacture of show cards." *Provisional protection only.*

WALTON. 8th June 1863.

1412. NICHOLAS WALTON, of Aldenham Street, Saint Pancras, in the County of Middlesex, for an invention for—"Improvements in apparatus for drying and airing clothes." *Letters Patent sealed.*

BROCKLEHURST. CREIGHTON. MAKINSON. CREIGHTON. 8th June 1863.

1413. WILLIAM COARE BROCKLEHURST, of Macclesfield, in the County of Chester, Silk Manufacturer, JOSEPH CREIGHTON, CHARLES MAKINSON, and JOHN CREIGHTON, all of Manchester, in the County of Lancaster, Machinists, for an invention for—"Certain improvements in machinery or apparatus for winding yarns or threads." *Letters Patent sealed.*

MILLER. 8th June 1863.

1414. WILLIAM MILLER, of No. 70, Upper Stamford Street, Blackfriars, in the County of Surrey, for an invention for—"An improved mode of constructing ships, vessels or boats, and of apportioning their freight to that construction, so as to prevent their sinking or being destroyed by fire." *Provisional protection only.*

CLARK. 8th June 1863.

1415. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in mounting and fitting bedsteads, chairs and other moveable seats on board ship."—*A communication to him from abroad by Herman Hoback and Martin Henri Rumpf, both of 29, Boulevart St. Martin, Paris, Commission Agents.* *Letters Patent sealed.*

CLARK. 8th June 1863.

1416. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"A new and useful device for turning cross head wrists or pins, or for turning any cylindrical part of machinery which is secured between two arms."—*A communication to him from abroad by Walter Scott Phelps, of Detroit, Wayne County, State of Michigan, United States of America.* *Provisional protection only.*

SCHOFIELD. 8th June 1863.

1417. EDWIN ARTHUR SCHOFIELD, of Eyam, in the County of Derby, Boot Manufacturer, for an invention for—"Improvements in tools or apparatus for paring, rasping and scraping the edges of boot and shoe soles and heels." *Provisional protection only.*

FRIEDERICH. 8th June 1863.

1418. GUSTAV WILHELM EDWARD FRIEDERICH, of No. 14, Shap Street, Kingsland Road, in the County of Middlesex, Professor of Music, for an invention for—"The manufacture of a new ink." *Complete specification; Letters Patent sealed.*

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GEDGE. 8th June 1863.

1419. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the construction of kites."—*A communication to him from abroad by Joseph Louis Horsin, of the Rue de Rivoli, Paris, France.*
Letters Patent sealed.

JONES. RIDLEY. 8th June 1863.

1420. JAMES GRAFTON JONES, of Cumming Street, Pentonville, in the County of Middlesex, and ROBERT RIDLEY, of Leeds, in the County of York, for an invention for—"Improvements in machinery and apparatus for working coal and other mines."
Letters Patent sealed.

HUMPHRYS. 8th June 1863.

1421. EDWARD HUMPHRYS, of Deptford Pier, in the County of Kent, Engineer, for an invention for—"Improvements in surface condensers."
Provisional protection only.

FURLEY. 8th June 1863.

1422. ROBERT CHARLES FURLEY, of Edinburgh, in the County of Mid-Lothian, for an invention for—"Improvements in the preparation of castor and other oils for medicinal use."
Letters Patent sealed.

REYNELL. 8th June 1863.

1423. HENRY REYNELL, of the City of Exeter, Gentleman, for an invention for—"Improvements in the manufacture (by the introduction of cocoa nut husk or part thereof) of a substitute for ordinary felt and kamptulicon, and in utilizing said cocoa nut husk or part thereof for packing of wine coolers, refrigerators and ice chests, and caulking of ships and vessels."
Letters Patent sealed.

NEWTON. 8th June 1863.

1424. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in needles."—*A communication to him from abroad by William Penn Hyde, of Warren, in the County of Bristol, State of Rhode Island, United States of America.*
Letters Patent sealed.

NEWTON. 8th June 1863.

1425. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in nozzles for hose and water discharge pipes."—*A communication to him from abroad by Consider Harvey Morrison, of Le Roy, in the State of New York, United States of America.*
Letters Patent sealed.

PETRIE. 8th June 1863.

1426. JOHN PETRIE, of Rochdale, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery or apparatus for washing wool and other fibrous materials."
Letters Patent sealed.

PAGE. 8th June 1863.

1427. THOMAS PAGE, of Adelphi Terrace, Strand, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in propelling vessels and in apparatus for the same."
Provisional protection only.

HILLS. 9th June 1863.

1428. GEORGE HILLS, of Blackheath, in the County of Kent, Chemist, for an invention for—"Improvements in obtaining certain products from hops."
Provisional protection only.

DOBSON. GREENHALGH. 9th June 1863.

1429. BENJAMIN DOBSON, of Bolton, in the County of Lancaster, Machine Maker, and DANIEL GREENHALGH, of the same place, Manager, for an invention for—"Certain improvements in machinery or apparatus for preparing cotton and other fibrous substances."
Letters Patent sealed.

BARLOW. NEWHOUSE. HAMILTON. HOPE. 9th June 1863.

1430. EDWARD BARLOW, of Bolton, in the County of Lancaster, Machine Maker, JAMES NEWHOUSE, of Farnworth, near Bolton, aforesaid, Manager, FRANCIS HAMILTON, Foreman, and WILLIAM HOPE, Carder, both of Bolton, aforesaid, for an invention for—"Certain improvements in machinery for grinding card teeth."
Provisional protection only.

NICQUET. 9th June 1863.

1431. CHARLES NICQUET, of Paris, France, Gentleman, for an invention for—"Improvements in apparatus for sorting and washing ores."
Letters Patent sealed.

EDWARDS. 9th June 1863.

1432. JOHN EDWARDS, of 29, Basinghall Street, in the City of London, for an invention for—"Improvements in railway chairs and sleepers."
Provisional protection only.

BROOMAN. 9th June 1863.

1433. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the distillation of bituminous substances."—*A communication to him from abroad by John Saunders, of New York, United States of America.*
Provisional protection only.

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MURRAY. 9th June 1863. **1434.** JOHN MURRAY, of Whitehall Place, in the County of Middlesex, Solicitor, for an invention for—"Improvements in clips or holders for inserting and fixing photographic pictures in albums." *Provisional protection only.*

MARTIN. 9th June 1863. **1435.** HENRY MARTIN, of Surrey Square, Old Kent Road, in the County of Surrey, Land Agent, for an invention for—"Improvements in treating and preparing night soil and sewage with other materials as a manure." *Provisional protection only.*

SIEGRIST. 9th June 1863. **1436.** MICHEL SIEGRIST, of Ewell, in the County of Surrey, for an invention for—"Improvements in the construction of fountains." *Provisional protection only.*

NEWTON. 9th June 1863. **1437.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66 Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the propulsion of ships and other vessels."—*A communication to him from abroad by Frederick Warren Harris, of Montreal, in the Province of Canada East.* *Provisional protection only.*

MCKILLOP. 9th June 1863. **1438.** HENRY FREDERICK MCKILLOP, Captain Royal Navy, of Belvedere, in the County of Kent, for an invention for—"Improvements in compositions for coating or covering ships' bottoms." *Provisional protection only.*

BESSEMER. 9th June 1863. **1439.** HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in the construction of and mode of working hydrostatic presses and hydraulic apparatus." *Letters Patent sealed.*

MADDERS. 10th June 1863. **1440.** WILLIAM MADDERS, of the City of Manchester, in the County of Lancaster, Embroiderer by machinery, for an invention for—"A new and improved ornamental fabric." *Provisional protection only.*

AITKEN. 10th June 1863. **1441.** RUSSEL AITKEN, of Cambridge Street, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the permanent way of railways." *Provisional protection only.*

ROBERTS. 10th June 1863. **1442.** WILLIAM ROBERTS, of Millwall, Poplar, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

ADAMS. 10th June 1863. **1443.** THOMAS ADAMS, of No. 5, Alfred Terrace, Spa Road, Bermondsey, in the County of Surrey, for an invention for—"Improvements in slide and other valves and apparatus connected therewith." *Letters Patent sealed.*

BROOKE. 10th June 1863. **1444.** JOSEPH BROOKE, of Bar Street, Laister Dyke, in the County of York, for an invention for—"Improvements in miners' lamps." *Provisional protection only.*

WELLS. MYERS. 10th June 1863. **1445.** WILLIAM WELLS, of Manchester, in the County of Lancaster, Gentleman, and JOHN WILLIAM MYERS, of the same place, Pattern Maker, for an invention for—"Improvements in apparatus for obtaining artificial light from volatile liquids or fluids." *Letters Patent sealed.*

EVANS. HUGHES. 10th June 1863. **1446.** THOMAS EVANS, of the City of Manchester, and EDWARD HUGHES, of the City of London, both Letter Press Printers, for an invention for—"Improvements in apparatus for applying one or more colors of ink to type in letter press printing by hand." *Letters Patent sealed.*

CLARK. 10th June 1863. **1447.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in locomotive apparatus which is also applicable to other purposes."—*A communication to him from abroad by Casimir Noël, of 29, Boulevart St. Martin, Paris, Merchant.* *Letters Patent sealed.*

HATSCHEK. 11th June 1863. **1448.** MORITZ HATSCHEK, of Pesth, in the Empire of Austria, now residing at No. 32, Lower Belgrave Place, in the County of Middlesex, Distiller, for an invention for—"An improved method of mashing." *Letters Patent sealed.*

CLARK. 11th June 1863. **1449.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in obtaining and applying motive-power and in apparatus for the same."—*A communication to him from abroad by Antoine Merlanchon, Director of the French Transatlantic Pascal Engine Company, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

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HARRISON. 11th June 1863.	**1450.** THOMAS MADDOCKS HARRISON, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of metallic casks." *Letters Patent sealed.*
HENRY. 11th June 1863.	**1451.** MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in treating floss silk and silk waste, and in apparatus for the same and other like purposes."—*A communication to him from abroad by Charles Torne, fils, of 33, Boulevard Saint Martin, Paris, France.* *Letters Patent sealed.*
KAIN. 11th June 1863.	**1452.** JOHN FRANCIS KAIN, of Fleur de lis Street, Norton Folgate, in the County of Middlesex, Ivory Worker, for an invention for—"Improvements in umbrellas, parasols, sunshades, walking sticks and whips, and in brooches and other ornaments." *Provisional protection only.*
DEANE. 11th June 1863.	**1453.** EDWARD DEANE, of No. 1, Arthur Street East, London Bridge, in the City of London, Engineer, for an invention for—"Improvements in cooking and culinary utensils." *Provisional protection only.*
VAN TENAC. 11th June 1863.	**1454.** CHARLES LOUIS VAN TENAC, of Tredegar, Monmouthshire, South Wales, Civil Engineer, for an invention for—"An improvement in railway wooden sleepers."—*A communication to him from abroad by Jean Arthur Granet, Civil Engineer, of 17, Rue Lafitte, Paris, in the Empire of France.* *Letters Patent sealed.*
VAN TENAC. 11th June 1863.	**1455.** CHARLES LOUIS VAN TENAC, of Tredegar, Monmouthshire, South Wales, Civil Engineer, for an invention for—"A new or improved daily balance book with moveable or sliding tickets or slips."—*A communication to him from abroad by Emile Canderon, of 25, Rue de Penthievre, Paris.* *Letters Patent sealed.*
WEBSTER. 11th June 1863.	**1456.** JAMES WEBSTER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in indurating iron and in protecting iron and steel from oxidation." *Letters Patent sealed.*
WALTON. 11th June 1863.	**1457.** WILLIAM WALTON, of Smethwick, in the County of Stafford, Coppersmith, for an invention for—"An improved pneumatic hammer useful also for punching and stamping metals." *Letters Patent sealed.*
SCHLUMBERGER. 11th June 1863.	**1458.** JULES ALBERT SCHLUMBERGER, of Basle, in the Republic of Switzerland, Manufacturing Chemist, for an invention for—"Improvements in the preparation of aniline dyes or colouring matters for dyeing, staining or printing textile substances." *Provisional protection only.*
SEED. 11th June 1863.	**1459.** WILLIAM SEED, of Derby Street, Preston, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery for drawing, slubbing, roving and spinning cotton and other fibrous material." *Provisional protection only.*
HALLETT. 11th June 1863.	**1460.** EDWIN OWEN HALLETT, of Weymouth and Melcombe Regis, in the County of Dorset, Cabinet Maker, for an invention for—"Improvements in constructing the sides of ships, batteries and fortifications, and in applying armour plates thereto." *Letters Patent sealed.*
JOHNSON. 11th June 1863.	**1461.** JAMES JOHNSON, of Peterborough, in the County of Northampton, Engineer, for an invention for—"Improvements in lubricating apparatus for the cylinders of steam-engines." *Provisional protection only.*
JOHNSON. BRAITHWAITE. 11th June 1863.	**1462.** JAMES JOHNSON, of Peterborough, in the County of Northampton, Engineer, and WILLIAM BRAITHWAITE, of the same place, Foreman, for an invention for—"Improvements in reversing levers for locomotive engines and others." *Letters Patent sealed.*
ELLIOTT. 11th June 1863.	**1463.** THOMAS ALEXANDER ELLIOTT, of Enniskillen, in the County of Fermanagh, Civil Engineer, for an invention for—"Improvements in reefing topsails and courses." *Provisional protection only.*
SIMS. 12th June 1863.	**1464.** WILLIAM SIMS, of Reading, in the County of Berks, Brewer, for an invention for—"A new compound extract to be employed as a means for the cure of deafness." *Letters Patent sealed.*
CALVERT. CALVERT. 12th June 1863.	**1465.** FRANCIS ALTON CALVERT, and FRANCIS CALVERT, both of the City of Manchester, Engineers, for an invention for—"Improvements in machinery for burring, ginning, cleaning and carding cotton and other fibrous substances." *Letters Patent sealed.*

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DAVIES. 12th June 1863.

1466. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the currying and finishing of leather."—*A communication to him from abroad by Benjamin Head Lightfoot, of Philadelphia, Pennsylvania, United States of America.*
Letters Patent sealed.

PLACE. 12th June 1863.

1467. JOSEPH PLACE, of Hoddlesden, in the County of Lancaster, Spinner and Manufacturer, for an invention for—"An improved combination of materials to be employed for the purposes of sizeing and stiffening." *Provisional protection only.*

WILSON. 12th June 1863.

1468. JOHN CHARLES WILSON, of 14A, Cannon Street, London, Civil and Mechanical Engineer, for an invention for—"Improvements in machinery for reducing cocoa nut kernels and other substances to a state of pulp."
Provisional protection only.

WILSON. 12th June 1863.

1469. JOHN CHARLES WILSON, of 14A, Cannon Street, London, Civil and Mechanical Engineer, for an invention for—"An improved machine for unhusking rice and other seeds." *Provisional protection only.*

BEDSON. 12th June 1863.

1470. GEORGE BEDSON, of Manchester, in the County of Lancaster, Manager of Iron Works, for an invention for—"Improvements in cupolas and blast furnaces."
Letters Patent sealed.

MARCH. 12th June 1863.

1471. THOMAS CHARLES MARCH, of St. James' Palace, in the City of Westminster, Gentleman, for an invention for—"Improvements applicable to the ornamentation or decoration of articles of furniture, part of which improvements may also be applied for architectural ornamentation." *Letters Patent sealed.*

MILNER. 12th June 1863.

1472. THOMAS HUGHES MILNER, of Edinburgh, in the County of Mid-Lothian, North Britain, Gentleman, for an invention for—"Improvements in thrashing machines."—*A communication to him from abroad by William Roberts, 21, A'Beckett Street, Melbourne, Machine Maker.* *Provisional protection only.*

HUGHES. 12th June 1863.

1473. ROBERT HUGHES, of the City and County of Worcester, Road Surveyor, for an invention for—"An improved implement or apparatus for scraping and sweeping turnpike and other highways, carriage drives and foot walks, or other places requiring to be so cleaned." *Letters Patent sealed.*

BARRON. 12th June 1863.

1474. HENRY STRACEY BARRON, of Morant Cottage, Blackheath Road, Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in steam fire engines, parts of which improvements are applicable to steam-boilers and to pumps generally." *Provisional protection only.*

TONE. 12th June 1863.

1475. JOHN FURNESS TONE, of the Town and County of Newcastle-upon-Tyne, Civil Engineer, for an invention for—"Improvements in the prevention of smoke in steam-boilers' and other furnaces."—*A communication to him from abroad by Henry David Furness, of Riga, in the Empire of Russia, Engineer.*
Provisional protection only.

DAVIDSON. 12th June 1863.

1476. GEORGE DAVIDSON, of Mugie Moss, in the County of Aberdeen, Paper Manufacturer, for an invention for—"Improvements in the manufacture of paper bags and in the machinery employed therein." *Letters Patent sealed.*

JONES. 12th June 1863.

1477. JOHN JONES, of Manchester, in the County of Lancaster, for an invention for—"Improvements in gas regulators." *Letters Patent sealed.*

DAVIES. 13th June 1863.

1478. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved mode of oiling journals or axles." —*A communication to him from abroad by Henry Wood, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

WRIGLEY. 13th June 1863.

1479. THOMAS WRIGLEY, of Bury, in the County of Lancaster, Paper Manufacturer, for an invention for—"Improvements in machinery or apparatus for filtering or cleansing water or other fluids." *Letters Patent sealed.*

HOPKINSON. 13th June 1863.

1480. JOHN HOPKINSON, of the City of Manchester, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in the mode of securing or fastening the ends of metal bands and in machinery for preparing the same."
Letters Patent sealed.

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HUTCHINSON. 13th June 1863.

1481. WILLIAM NELSON HUTCHINSON, of Plymouth, in the County of Devon, Major-General in Her Majesty's Army, for an invention for—"Improvements in means of and apparatus for cleansing ships' bottoms and sides." *Provisional protection only.*

BLACKBURN. 13th June 1863.

1482. ROBERT BLACKBURN, of Exeter, in the County of Devon, Engineer, for an invention for—"Improvements in traction engines." *Letters Patent sealed.*

ELLIOTT. 13th June 1863.

1483. THOMAS ALEXANDER ELLIOTT, of Enniskillen, in the County of Fermanagh, Civil Engineer, for an invention for—"Improvements in the construction of and in the means of ballasting ships and other vessels." *Letters Patent sealed.*

MÉHU. 13th June 1863.

1484. AIMÉ MÉHU, of Petit Talard, near the Town of Saint Malo, in the Empire of France, Mechanical Smith, for an invention for—"An improved helm for working the rudders of ships or vessels." *Provisional protection only.*

BENSON. JONES. 13th June 1863.

1485. JOHN SOLOMONS BENSON, Merchant, and DAVID JONES, Manufacturer, both of Birmingham, in the County of Warwick, for an invention for—"An improved construction of removable head for casks, applicable to the closing of other vessels." *Letters Patent sealed.*

WESTHEAD. 13th June 1863.

1486. MARCUS BROWN WESTHEAD, of Manchester, in the County of Lancaster, Manufacturer and Merchant, for an invention for—"Improvements in adapting tapes, ribbons and other such narrow fabrics or thread to surfaces from which they may be unwound or upon which they may be rewound." *Letters Patent sealed.*

BASS. BASS. 13th June 1863.

1487. ISAAC GRAY BASS, and WILLIAM BASS, both of Broughton Little, in the County of Cumberland, and carrying on business at Workington, in the said County, under the style or firm of I. G. Bass & Son, Nail Manufacturers, for an invention for—"Improvements in the manufacture of nails and spikes." *Letters Patent sealed.*

WAGSTAFF. 13th June 1863.

1488. HENRY GRAHAM WILLIAM WAGSTAFF, of Radnor Terrace, in the County of Middlesex, Tallow Melter, for an invention for—"Improved apparatus for feeding steam-boilers with water, which apparatus is also applicable for raising water." *Letters Patent sealed.*

ROBSON. 13th June 1863.

1489. SAMUEL SINCLAIR ROBSON, of Hendon House, Sunderland, in the County of Durham, for an invention for—"Improvements in apparatus for working the rudders of vessels, and in auxiliary steering apparatus." *Letters Patent sealed.*

SHAND. 13th June 1863.

1490. JAMES SHAND, of the firm of Messieurs Shand, Mason and Company, of Upper Ground Street, Blackfriars Road, in the County of Surrey, for an invention for—"Improvements in the arrangement and construction of steam fire-engines and in steam-boilers for the same, such boilers being applicable to other purposes." *Letters Patent sealed.*

BOX. 15th June 1863.

1491. WILLIAM WILLIAMS BOX, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in fire bars for the boilers of locomotive and other engines, and for fire boxes and furnaces generally." *Provisional protection only.*

FORRESTER. 15th June 1863.

1492. JOHN FORRESTER, of Burslem, in the County of Stafford, for an invention for—"Improvements in the manufacture of bricks, quarries, slabs, tiles, earthenware pipes, and other earthenware or ceramic articles." *Letters Patent sealed.*

COPE. 15th June 1863.

1493. THOMAS COPE, of Liverpool, in the County of Lancaster, Tobacco Manufacturer, for an invention for—"Improvements in the construction of rocking horses and in giving additional motion thereto."—*A communication to him from abroad by William Hignett, of New York, U.S. of America.* *Provisional protection only.*

BARLOW. 15th June 1863.

1494. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in machinery for opening and cleaning cotton and other fibrous substances."—*A communication to him from abroad by John Edo Van Winkle, of Paterson, State of New Jersey, United States of America.* *Provisional protection only.*

HARRIS. 15th June 1863.

1495. ISAAC BLUE HARRIS, of the North British Rubber Company (Limited), Castle Mills, Fountain Bridge, Edinburgh, for an invention for—"Improvements in the manufacture of flexible and other tubes." *Letters Patent sealed.*

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JUCKES. 15th June, 1863.

1496. JOHN JUCKES, junior, of No. 1, Armaught Road, Roman Road, Old Ford, Bow, in the County of Middlesex, for an invention for—"Improvements in furnaces." *Provisional protection only.*

PETITJEAN. 15th June, 1863.

1497. TONY PETITJEAN, of Geneva, in Switzerland, Chemist, for an invention for—"Improvements in the manufacture of glass." *Provisional protection only.*

GORDON. 15th June, 1863.

1498. ROBERT WILSON GORDON, of Belfast, for an invention for—"Improvements in machinery for spinning flax and other fibrous substances." *Letters Patent sealed.*

CLARK. 15th June, 1863.

1499. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Certain improvements in engines for obtaining motive-power from steam or other liquid, also partly applicable to pumps."—*A communication to him from abroad by John Benjamin Root, of Brooklyn, King's County, State of New York, United States of America.* *Letters Patent sealed.*

STAFFORD. 15th June 1863.

1500. PATRICK PLUNKETT LESLIE STAFFORD, of St. James' Square, in the County of Middlesex, Captain in Her Majesty's Indian Army, for an invention for—"Improvements in fire-arms." *Provisional protection only.*

SHEDLOCK. 16th June 1863.

1501. JAMES JOHN SHEDLOCK, of Vincent Street, Westminster, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in valves for the passage of steam, gas and fluids." *Letters Patent sealed.*

WILLIAMS. 16th June 1863.

1502. FRANCIS STANTON WILLIAMS, of the City of Boston, in the County of Suffolk, in the Commonwealth of Massachusetts, one of the United States of America, for an invention for—"An improved apparatus for shaping plastic materials and hot but not melted metals, by means of pressure, percussion or rolling."—*A communication from the inventor Elbridge Wheeler, a person resident at Marlborough, in the County of Middlesex, and Commonwealth aforesaid.* *Letters Patent sealed.*

MANWARING. 16th June 1863.

1503. WILLIAM MANWARING, of Banbury, Engineer, for an invention for—"Improvements in harvesting machines." *Letters Patent sealed.*

GROGAN. 16th June 1863.

1504. RODERICK GROGAN, of 27, Hereford Road North, Bayswater, London, W., for an invention for—"Gravelling and macadamizing roads and paths." *Provisional protection* NOT *granted.*

LIGHTFOOT. 16th June 1863.

1505. JOHN LIGHTFOOT, of Accrington, in the County of Lancaster, Chemist, for an invention for—"Improvements in fixing mordants in the processes of dyeing and printing textile fabrics or yarns." *Letters Patent sealed.*

JENNINGS. LAVATER. 16th June 1863.

1506. JOSIAH GEORGE JENNINGS, of Palace Road, Lambeth, in the County of Surrey, Sanitary Engineer, and MANUEL LEOPOLD JONAS LAVATER, of Bath Street, Newgate Street, in the City of London, India-rubber Manufacturer, for an invention for—"Improvements in moulding and vulcanizing articles of india-rubber." *Letters Patent sealed.*

SCORE. 16th June 1863.

1507. WILLIAM SCORE, of No. 30, St. Paul's Road, Camden Town, in the County of Middlesex, Chemist, for an invention for—"Improvements in the manufacture of candles and soap." *Provisional protection only.*

STEELE. MASON. 16th June 1863.

1508. JOSEPH STEELE, and WILLIAM MASON, both of Leeds, in the County of York, Corn Factors, for an invention for—"Improvements in apparatus for removing the bran or outer skin from wheat and other grain." *Letters Patent sealed.*

FRASER. 16th June 1863.

1509. ALEXANDER JOHN FRASER, of Water Lane, Great Tower Street, in the City of London, for an invention for—"Improvements in apparatus applied to house and carriage window sashes for the working and fastening thereof." *Letters Patent sealed.*

NEILL. 16th June 1863.

1510. WILLIAM NEILL, junior, of Bold, near St. Helen's, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

ONIONS. 16th June 1863.

1511. JOHN COLLINGWOOD ONIONS, of Birmingham, in the County of Warwick, Smiths' Bellows and Patent Portable Forge Manufacturer, for an invention for—"Improvements in smiths' and other bellows." *Letters Patent sealed.*

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BROOMAN. 16th June 1863.

1512. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—" Improvements in protecting or preserving the silvering or quicking on glass, and in the manufacture of glass vessels for silvering or quicking."—*A communication to him from abroad by Joseph Jules Anthoine and François Etienne Hyppolite Brossette, both of Paris, France.*
Letters Patent sealed.

DAWES. 17th June 1863.

1513. WILLIAM HENRY DAWES, of Bromford Iron Works, West Bromwich, in the County of Stafford, Iron Master, for an invention for—" Improvements in the manufacture of iron."
Letters Patent sealed.

BANWELL. 17th June 1863.

1514. JOHN BANWELL, of Watlington, in the County of Oxford, for an invention for—" A combined machine for collecting and placing in rows, or collecting and elevating into a waggon or elsewhere, hay, corn or other agricultural produce.
Letters Patent sealed.

MILLS. 17th June 1863.

1515. JOHN MILLS, the elder, of Sunderland, in the County of Durham, Cordwainer, for an invention for—" Improvements in the square rigging of vessels."
Provisional protection only.

NEWNAM. 17th June 1863.

1516. JAMES NEWNAM, of Crayford, in the County of Kent, Sugar Refiner, for an invention for—" Improved means of and apparatus for boiling in vacuo at a low temperature."
Letters Patent sealed.

SPENCER. 17th June 1863.

1517. JOHN FREDERICK SPENCER, Consulting Engineer, of Newcastle-on-Tyne, for an invention for—" Improvements in steam, gas and water tube joints."
Provisional protection only.

CROFTS. 17th June 1863.

1518. WILLIAM CROFTS, of New Lenton, near Nottingham, Manufacturer, for an invention for—" Improvements in the production of fabrics by lace machinery, and in means or apparatus employed therein."
Provisional protection only.

DE WYLDÉ. 17th June 1863.

1519. FÉDOR DE WYLDÉ, of Great College Street, Camden Town, in the County of Middlesex, for an invention for—" An improved means for the protection and preservation of lead surfaces exposed to the action of water, and for the protection of such surfaces from decomposition by atmospheric action."—*A communication to him from abroad by Professor Dr. Henry Schwarz, of Breslau, in the Kingdom of Prussia.*
Letters Patent sealed.

WOLF. 17th June 1863.

1520. EDWARD WOLF, of Sambrook Court, Basinghall Street, in the City of London, Merchant, for an invention for—" A new or improved wrapper or wrapping material for use in smoking tobacco."
Provisional protection only.

PURDIE. 17th June 1863.

1521. THOMAS PURDIE, of 314, Oxford Street, in the County of Middlesex, for an invention for—" Improvements in the plastering, colouring and decoration of walls and ceilings."
Provisional protection only.

SAMUELSON. 17th June 1863.

1522. ALEXANDER SAMUELSON, of 28, Cornhill, in the City of London, Engineer and Steam Ship Builder, for an invention for—" Improvements in apparatus for evaporating liquids."
Letters Patent sealed.

NAYLOR. 17th June 1863.

1523. WILLIAM NAYLOR, of Queen's Road, Dalston, in the County of Middlesex, Engineer, for an invention for—" Improvements in apparatus for compressing, holding and regulating the pressure of gas."
Letters Patent sealed.

SPARLING. 18th June 1863.

1524. JOHN ALEXANDER SPARLING, of Upper Hornsey Rise, in the County of Middlesex, Gentleman, for an invention for—" Improvements in twisting and winding silk, and in the machinery or apparatus to be employed therein."
Letters Patent sealed.

GANNE. 18th June 1863.

1525. JULES LOUIS GANNE, of Cour-Cheverny, France, Engineer, for an invention for—" Improvements in toy pistols."
Letters Patent sealed.

LOWE. CHEETHAM. 18th June 1863.

1526. WILLIAM SCOWCROFT LOWE, of Disley, in the County of Chester, and JOHN CHEETHAM, of Oldham, in the County of Lancaster, for an invention for—" Improvements in self-acting mules for spinning cotton and other fibrous materials."
Provisional protection only.

BARKER. 18th June 1863.

1527. DAVID BARKER, of Milton Street, Wandsworth Road, in the County of Surrey, Corn Merchant, for an invention for—" Improvements in the treatment and preservation of yeast."
Letters Patent sealed.

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ROLPH.
HEALD.
18th June 1863.

1528. JONAS ROLPH, of the Town and County of the Town of Nottingham, Lace Merchant, and ALFRED HEALD, of the same place, Designer and Draughtsman, for an invention for—"Improvements in sewing-machines, which said improvements are also applicable to other useful purposes." *Provisional protection* NOT *granted.*

IVETT.
18th June 1863.

1529. EPHRAIM IVETT, of Bedford, Brick and Tile Manufacturer, for an invention for—"Improved machinery for the manufacturing tiles."
Provisional protection only.

JOBSON.
18th June 1863.

1530. ROBERT JOBSON, of Dudley, in the County of Worcester, for an invention for—"Improvements in machinery for making moulds, to be employed when casting metal." *Letters Patent sealed.*

GOSSIAUX.
18th June 1863.

1531. EDWARD GOSSIAUX, Manufacturer, at Laeken, near Brussels, Kingdom of Belgium, for an invention for—"An improved machine for making bolts, rivets and spikes." *Letters Patent sealed.*

REYNOLDS.
19th June 1863.

1532. HENRY REYNOLDS, of Fleet Street, in the City of London, Gentleman, for an invention for—"An improved method of rendering atmospheric air fit for illuminating purposes, and of increasing the illuminating power of inflammable gas."
Provisional protection only.

HOWARTH.
BROWN.
19th June 1863.

1533. EDMUND HOWARTH, of Tonge, near Middleton, in the County of Lancaster, Cotton Spinner, and JOHN BROWN, of the same place, Machinist, for an invention for—"Certain improvements in apparatus for steaming cotton or other fibrous substances." *Provisional protection only.*

MIDDLETON.
19th June 1863.

1534. SAMUEL MIDDLETON, of Newtown Cottage, Hants, near Newbury, Berks, Mechanic, for an invention for—"Improvements in the manufacture of iron or other metal shoes, and in the method of securing the same to the hoofs of horses and other animals without nails." *Provisional protection only.*

MARRISON.
19th June 1863.

1535. ROBERT MARRISON, of Great Orford Street, Norwich, in the County of Norfolk, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

BONNEVILLE.
19th June 1863.

1536. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in machinery for the manufacture of bolts and rivets."—*A communication from Jacques Victor Gauthier, Manufacturer, a person resident at 24, Rue du Mont Thabor, Paris, in the Empire of France.*
Complete specification: Letters Patent sealed.

MOREL.
19th June 1863.

1537. AUGUSTIN MOREL, of Roubaix, in the Department of the Nord, in the Empire of France, Manufacturer, for an invention for—"Improvements in machinery for combing wool and other fibrous material." *Letters Patent sealed.*

MOREL.
19th June 1863.

1538. AUGUSTIN MOREL, of Roubaix, in the Department of the Nord, in the Empire of France, Manufacturer, for an invention for—"Improvements in traction engines." *Letters Patent sealed.*

WATTS.
19th June 1863.

1539. JOSEPH WATTS, of Coventry, in the County of Warwick, Accountant Clerk, for an invention for—"Improvements in machinery or apparatus for the manufacture of malt." *Letters Patent sealed.*

HICKLIN.
19th June 1863.

1540. WILLIAM HICKLIN, of Ball's Pond, in the County of Middlesex, for an invention for—"Improvements in metal screens and sieves for screening and sifting, applicable also to other openwork articles." *Provisional protection only.*

NEWTON.
19th June 1863.

1541. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of leaden pipes."—*A communication to him from abroad by Augustin Henri Hamon, of Paris, in the Empire of France.*
Provisional protection only.

HENRY.
19th June 1863.

1542. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in decorticating grain and seeds, and in the application of the products obtained by and materials used in decorticating."—*A communication to him from abroad by Jules Lemoine and Louis Joseph Maximilien Chollet, of 33, Boulevard Saint Martin, Paris, France.* *Provisional protection only.*

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SMITH. MOORE. BURRELL. 20th June 1863.

1543. THOMAS SMITH, Millwright, of Tenter Lane, Leeds, THOMAS MOORE, Corn Miller, of Upper Mills, Wandsworth, near London, and MAJOR BURRELL, Corn Miller, of King's Mills, Leeds, for an invention for—"Certain improvements in the construction of reels covered with silk or other suitable material, used as machines for the purpose of dressing flour." *Letters Patent sealed.*

MEIRAT. 20th June 1863.

1544. YENN MEIRAT, of No. 2, Angel Court, Great Windmill Street, in the Parish of St. James, and County of Middlesex, for an invention for—"Propelling vessels of every description and size by water power." *Provisional protection* NOT *granted.*

KYLE. 20th June 1863.

1545. DAVID DUNNE KYLE, of Victoria Street, Westminster, for an invention for—"An improvement in baths." *Letters Patent sealed.*

HASELTINE. 20th June 1863.

1546. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved oil more especially designed for mixing paints and colors, and new mode of manufacturing the same."—*A communication to him from abroad by Adolph Millochau, of the City, County and State of New York, United States of America.* *Provisional protection only.*

BROWNLEE. 20th June 1863.

1547. ROBERT BROWNLEE, of Glasgow, in the County of Lanark, North Britain, Saw Miller, for an invention for—"Improvements in sawing machinery." *Letters Patent sealed.*

FASSIO. 20th June 1863.

1548. PHILIP FASSIO, residing at Nismes, Rue des Orangers, No. 1, in the Empire of France, for an invention for—"A new method of connecting several fire-places with one chimney." *Provisional protection only.*

BRIXEY. 20th June 1863.

1549. GEORGE BRIXEY, of Maida Hill, in the County of Middlesex, for an invention for—"Improvements in apparatus and implements for cleaning spoons and forks." *Provisional protection only.*

PETERSON. 20th June 1863.

1550. CHARLES PETERSON, of Newport, Isle of Wight, for an invention for—"A new material or compound applicable to the manufacture of pipes or tubes, to caulking or covering ships' bottoms, and to other useful purposes." *Letters Patent sealed.*

CLARKE. 20th June 1863.

1551. JAMES LANGDON CLARKE, of No. 45, Westbourne Terrace, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for turning over the leaves of music and other books." *Letters Patent sealed.*

MACAULAY. 20th June 1863.

1552. HENRY MACAULAY, of Rotherham, in the County of York, for an invention for—"Improvements in covers or appliances for the rims, borders or top edges of chamber utensils, applicable also to commodes and water-closets." *Provisional protection only.*

JENKIN. 20th June 1863.

1553. FLEEMING JENKIN, of Duke Street, Adelphi, in the County of Middlesex, for an invention for—"An electric tell tale compass." *Provisional protection only.*

GOLL. 20th June 1863.

1554. ALEXANDER THEODORE NICHOLAUS GOLL, of Caledonian Road, in the County of Middlesex, Jeweller, for an invention for—"Improvements in the manufacture of mountings or settings for precious or other stones." *Provisional protection only.*

WINANS. WINANS. 20th June 1863.

1555. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in the construction of steam vessels." *Letters Patent sealed.*

WINANS. WINANS. 20th June 1863.

1556. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in couplings for propelling shafts of ships or vessels." *Letters Patent sealed.*

WINANS. WINANS. 20th June 1863.

1557. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in adapting propellers for propelling ships or vessels for ocean navigation." *Letters Patent sealed*

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WINANS. WINANS. 20th June 1863.

1558. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in adapting propellers for propelling ships or vessels for ocean navigation." *Letters Patent sealed.*

CLARK. 20th June 1863.

1559. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the treatment of broom for the manufacture of paper pulp."—*A communication to him from abroad by Louis Alexandre Joseph Deplanque, of 29, Boulevart St. Martin, Paris, Merchant.* *Letters Patent sealed.*

BOOTH. 20th June 1863.

1560. JAMES BOOTH, the younger, of Halifax, in the County of York, for an invention for—"Improvements in winding machines." *Provisional protection only.*

SAINTY. 22nd June 1863.

1561. JOHN SAINTY, of Burnham Market, Norfolk, Agricultural Implement Manufacturer, for an invention for—"An improved turnip cutter for cutting the last slice." *Provisional protection only.*

WILKS. 22nd June 1863.

1562. EDWIN WILKS, Portmanteau Maker, Cheltenham, for an invention for—"Improvements in making portmanteaus and trunks of various shapes and sizes, light, strong, air-tight and water-tight, capable of bearing immersion in water without injuring the contents." *Letters Patent sealed; no specification filed.*

TWADDELL. 22nd June 1863.

1563. ALEXANDER TWADDELL, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in sizeing or preparing warps." *Letters Patent sealed.*

MCLEAN. 22nd June 1863.

1564. JOHN MCLEAN, of Dander Hall, West Calder, in the County of West Lothian, North Britain, Manufacturing Chemist, for an invention for—"Improvements in treating oil from shale or other bituminous minerals, and similar oils, to obtain various products therefrom, and in apparatus therefor." *Provisional protection only.*

SNELL. 22nd June 1863.

1565. WILLIAM SNELL, of No. 16, Clement's Inn, Strand, in the County of Middlesex, for an invention for—"Improvements in arrow-shaped projectiles, and in guns for discharging the same."—*A communication to him from abroad by Ferdinand Leitenberger, of Reichstadt, Bohemia, retired Captain in the Austrian Army.* *Letters Patent sealed.*

BOULT. 22nd June 1863.

1566. FRANCIS BOULT, of Liverpool, Merchant, for an invention for—"An improved method or process for obtaining patterns and designs for the arts and manufactures."—*A communication to him from abroad by Thomas James Hussey, Clerk, residing at Algiers, in Africa.* *Provisional protection only.*

MAJOLIER. 22nd June 1863.

1567. LOUIS ANTOINE MAJOLIER, of Stoke Newington, in the County of Middlesex, Merchant, for an invention for—"Improvements in apparatus for carburetting gases."—*A communication to him from abroad by Henry Nordhoff, of Nismes, France.* *Letters Patent sealed.*

ROWAN. 22nd June 1863.

1568. WILLIAM ROWAN, of the firm of John Rowan & Sons, of Belfast, in the County of Antrim, Engineers, for an invention for—"Improvements in pistons." *Letters Patent sealed.*

CLARK. 22nd June 1863.

1569. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for charging air or gases with combustible vapours."—*A communication to him from abroad by Joseph Chapa and Jacques Charrié, both of 29, Boulevart St. Martin, Paris, Gas Engineers.* *Letters Patent sealed.*

WINANS. WINANS. 22nd June 1863.

1570. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in adapting propellers for propelling ships or vessels." *Letters Patent sealed.*

WINANS. WINANS. 22nd June 1863.

1571. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in adapting propellers for propelling ocean steam vessels." *Letters Patent sealed.*

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WINANS. WINANS. 22nd June 1863.

1572. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for "Improvements in the construction or arrangement of the working parts of engines for actuating the propelling shafts of steam vessels." *Letters Patent sealed.*

NEWTON. 22nd June 1863.

1573. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in printing machinery."—*A communication to him from abroad by Gustave Gilbert Leboyer, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

BURGESS. 22nd June 1863.

1574. CHARLES THOMAS BURGESS, of Gower Street, in the County of Middlesex, at present residing at Madrid, in the Kingdom of Spain, for an invention for—"Improvements in reaping machines." *Letters Patent sealed.*

MURRAY. 23rd June 1863.

1575. JOHN MURRAY, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in machinery for making chains or chain cables and rings." *Letters Patent sealed.*

STOCKER. 23rd June 1863.

1576. ALEXANDER RICHMOND STOCKER, of Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in preparing and fashioning iron applicable to the manufacture of boot heels, tips, and horse shoes, and in part of the machinery or apparatus to be employed therein." *Letters Patent sealed.*

ELLISON. ROGERSON. 23rd June 1863.

1577. JAMES ELLISON, and ABRAHAM ROGERSON, both of Bury, in the County of Lancaster, Mechanics, for an invention for—"Improvements in slubbing, intermediate and roving frames, in the throstles and winding machines used for the manufacture of cotton or other fibrous materials." *Letters Patent sealed.*

SLEIGH. 23rd June 1863.

1578. WILLIAM WILLCOCKS SLEIGH, of London, in the County of Middlesex, Doctor of Medicine, for an invention for—"A new method for obtaining motive-power." *Letters Patent sealed; no specification filed.*

ROBINSON. PRIESTLEY. FOULDS. 23rd June 1863.

1579. SAMUEL ROBINSON, Mechanic, JOSEPH PRIESTLEY, and JEREMIAH FOULDS, Overlookers, all in the employ of Thomas Dewhirst, Worsted Spinner and Manufacturer, of Bradford, in the County of York, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

PARSONS. 23rd June 1863.

1580. THOMAS FULHAM PARSONS, Chemist, of Maindee, in the parish of Christchurch, in the County of Monmouth, for an invention for—"Certain improvements in the mode or modes of preparing plates, bars or other objects of iron, for being coated with metals or alloys." *Letters Patent sealed.*

BROOMAN. 23rd June 1863.

1581. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in breech-loading arms."—*A communication to him from abroad by Cosme Garcia Saez, of Madrid, Spain.* *Letters Patent sealed.*

WINANS. WINANS. 23rd June 1863.

1582. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

WINANS. WINANS. 23rd June 1863.

1583. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in lessening the friction of the rubbing surfaces of the slide valves of engines, and of the journals of shafts." *Provisional protection only.*

WINANS. WINANS. 23rd June 1863.

1584. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in the arrangement of apparatus for superheating steam in steam-boilers." *Letters Patent sealed.*

BROOKS. 23rd June 1863.

1585. EDGAR BROOKS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

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MEIN. 23rd June 1863.

1586. ANDREW MEIN, of Hope Iron Works, Station Street, Stratford, in the County of Essex, for an invention for—"Improvements in apparatus for generating steam." *Provisional protection only.*

FEICHTINGER. 23rd June 1863.

1587. FRANZ FEICHTINGER, of No. 26, Cumberland Street South, Belgravia, in the County of Middlesex, for an invention for—"Improvements in the manufacture of paper applicable for hemorrhoidal complaints." *Provisional protection only.*

TOOVEY. 23rd June 1863.

1588. WILLIAM TOOVEY, of No. 3, Rue de La Pompe, Brussels, in the Kingdom of Belgium, Lithographic Printer, for an invention for—"Improvements in photo-lithography, photo-zincography, and photographic engraving on copper or steel plates, or on any other suitable substances." *Letters Patent sealed.*

KNOWLES. HAYWARD. 24th June 1863.

1589. SAMUEL KNOWLES, of Tottington Mill, near Bury, in the County of Lancaster, Calico Printer, and ROBERT HAYWARD, of the same place, Machine Engraver, for an invention for—"Improvements in machinery for plaiting and measuring woven fabrics." *Letters Patent sealed.*

REDWOOD. 24th June 1863.

1590. THEOPHILUS REDWOOD, of Summerfield Works, Lower Homerton, in the County of Middlesex, for an invention for—"Improved apparatus for straining or for mixing and straining liquid and solid substances." *Letters Patent sealed.*

HODGE. 24th June 1863.

1591. PAUL RAPSEY HODGE, of No. 25, Cannon Street, E.C., in the City of London, Civil Engineer, for an invention for—"Improved fleeting hydrostatic machinery adapted to presses, dry docks, slips, or the moving or lifting of heavy masses, parts of which are applicable to the expressing of oil or other fluids." *Letters Patent sealed.*

MYERS. WILLIAMS. 24th June 1863.

1592. EDWARD MYERS, of 2, Millbank Row, County of Middlesex, Civil Engineer, and WILLIAM RICHARD WILLIAMS, Meter Maker, of 35, Lambs Conduit Street, County of Middlesex, for an invention for—"Improvements in wet gas meters." *Letters Patent sealed.*

SMITH. 24th June 1863.

1593. SAMUEL SMITH, of No. 5, Fell Street, in the City of London, for an invention for—"Improvements in the manufacture of liquorice, and in the means or apparatus employed therein." *Letters Patent sealed.*

HUGHES. 24th June 1863.

1594. JAMES LEIGH HUGHES, of Leek Road, near Joiner Square, Hanley, Staffordshire, for an invention for—"Improvements in ornamenting porcelain." *Letters Patent sealed.*

SKINNER. 24th June 1863.

1595. THOMAS SKINNER, of Sheffield, in the County of York, Electroplater and Engraver, for an invention for—"Improvements in the ornamentation of silver, german silver, britannia metal, electroplated or other plated goods." *Letters Patent sealed.*

BRAE. 24th June 1863.

1596. ANDREW EDMUND BRAE, of Leeds, in the County of York, for an invention for—"Improvements in apparatus for actuating domestic bells and other signals by the electric current." *Letters Patent sealed.*

RIPLEY. 25th June 1863.

1597. ABRAHAM RIPLEY, of Brook Street, West Square, Lambeth, in the County of Surrey, Engineer, for an invention for—"Improvements in the method and construction of a packing chiefly applicable to piston rods, pumps and such like, and for forming the joints of gas, steam or water pipes." *Letters Patent sealed.*

DE LIANCOURT. 25th June 1863.

1598. CALLISTUS AUGUSTUS COUNT DE GODDES DE LIANCOURT, Naturalized English Citizen, residing No. 19, Holly Street, N.E., Dalston, London, for an invention for—"Improvements in apparatus for the preservation of life from drowning." *Provisional protection only.*

HUSSEY. 25th June 1863.

1599. DANIEL HUSSEY, a resident of Nashua, in the State of New Hampshire, of the United States of America, for an invention—"Having reference to bobbins and the winding of roving or yarn thereon." *Complete specification; Letters Patent sealed.*

PAGE. 25th June 1863.

1600. THOMAS PAGE, of Adelphi Terrace, in the County of Middlesex, for an invention for—"Improvements in horse shoes and in their fastenings." *Letters Patent sealed.*

MATHIEU. 25th June 1863.

1601. JULES OUARNIER MATHIEU, of Paris, France, Gentleman, for an invention for—"Improvements in twisting machines particularly applicable to the manufacture of strings, strands, ropes or cables." *Letters Patent sealed.*

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MUSHET. 25th June 1863.

1602. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"Improvements in the manufacture of iron and steel."
Letters Patent sealed.

KIRRAGE. 25th June 1863.

1603. WILLIAM KIRRAGE, of No. one, Victoria Street, City, Surveyor, for an invention for—"Using Apo elastikon hyphrasma as a new and improved cloth for floors, roofs, walls, tanks and other linings, being impervious to damp and of great strength and durability."
Letters Patent sealed.

CRAIG. 25th June 1863.

1604. HENRY GRIFFITH CRAIG, of Passage West, in the County of Cork, in Ireland, of the firm of William and Henry Brown and Craig, of the same place, Shipbuilders, for an invention for—"Improvements in machinery for manufacturing or preparing iron and other metal plates for shipbuilding and other purposes."
Letters Patent sealed.

LEE. 25th June 1863.

1605. HENRY CLAY LEE, of Lawrence Pountney Lane, in the City of London, Merchant, for an invention for—"Improvements in the construction of sewing-machines."—*A communication to him from abroad by Richard Mott Wanzer, of Hamilton, Canada West, America.* *Letters Patent sealed.*

WATSON. 25th June 1863.

1606. ALFRED WATSON, of King Street, in the City of London, Engineer, for an invention for—"An improved fastening." *Letters Patent sealed.*

HEAD. BRINSMEAD. 25th June 1863.

1607. JOHN HEAD, and HENRY BRINSMEAD, both of Ipswich, in the County of Suffolk, for an invention for—"Improvements in machinery applicable to thrashing machines, and for cutting and bruising straw." *Provisional protection only.*

TULPIN. 26th June 1863.

1608. ALFRED TULPIN, of the City of Manchester, Engineer, for an invention for—"Improvements in machinery for stretching and drying fabrics."—*A communication to him from abroad by Alexandre Fortuné Tulpin, of Rouen, in the Empire of France, Engineer.* *Letters Patent sealed.*

CLARK. 26th June 1863.

1609. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for aërating liquids."—*A communication to him from abroad by Frédéric Jean Greffier and Paul Dyé, both of 29, Boulevart St. Martin, Paris, Manufacturing Chemists.*
Letters Patent sealed.

BOCCIUS. 26th June 1863.

1610. GOTTLIEB BOCCIUS, of Henrietta Street, in the County of Middlesex, Naturalist, for an invention for—"An improved composition suitable for the manufacture of candles and other like articles, and of pomatum, and an improved wick for burning with such composition." *Letters Patent sealed.*

GEDGE. 26th June 1863.

1611. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for placing tyres on wheels, or hooping or ferruling generally, while the metal is hot."—*A communication to him from abroad by Charles Imhoff, of No. 15, Passage des Petites Ecuries, Paris, France, Smith.*
Provisional protection only.

GRIFFITHS. 26th June 1863.

1612. JOHN GRIFFITHS, Derby, Manager of Iron Works, for an invention for—"Improvements in machinery for puddling iron and steel." *Letters Patent sealed.*

MUSHET. 26th June 1863.

1613. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"Improvements in the manufacture of iron and steel."
Letters Patent sealed.

DUNN. 27th June 1863.

1614. THOMAS DUNN, of the Windsor Bridge Iron Works, near the City of Manchester, Engineer, for an invention for—"Improvements in the construction and maintenance of the permanent way of railways." *Letters Patent sealed.*

CLARK. 27th June 1863.

1615. GEORGE CLARK, of No. 30, Craven Street, Strand, Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of guns and projectiles, and of carriages, platforms and shields for working and protecting guns." *Letters Patent sealed; specification filed by order.*

BRADSHAW. BRADSHAW. 27th June 1863.

1616. WILLIAM BRADSHAW, and JAMES BRADSHAW, both of Blackburn, in the County of Lancaster, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

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HUGHES. 27th June 1863.

1617. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in couplings for hose pipes, and also in connecting axles to the naves or bosses of wheels."—*A communication to him from abroad by Edmund Blodget Jucket, of the City and County of New Haven, State of Connecticut, United States of America.*
Provisional protection only.

CHATTERTON. 27th June 1863.

1618. JOHN CHATTERTON, of Highbury, in the County of Middlesex, Engineer, for an invention for—"Improvements in lining iron and other tubes and hollow vessels, and in manufacturing corrugated tubes of plastic materials."
Letters Patent sealed.

DAVIES. 29th June 1863.

1619. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved cork cutting machine."—*A communication to him from abroad by Edward Borie and Alexander Mackie, both of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

ANDREWS. 29th June 1863.

1620. WILLIAM ANDREWS, of 237, Gresham House, Old Broad Street, in the City of London, for an invention for—"Improvements in apparatus for insulating electric telegraph wires." *Letters Patent sealed.*

AVERY. 29th June 1863.

1621. CYRUS AVERY, of Philadelphia, Pennsylvania, United States, now residing at No. 39, Craven Street, Strand, in the County of Middlesex, for an invention for—"Improvements in rotary engines." *Letters Patent sealed.*

HICKS. 29th June 1863.

1622. LUCIEN EZRA HICKS, of the City and State of New York, United States of America, for an invention for—"An improvement in inkstands."
Provisional protection only.

DUGGAN. 30th June 1863.

1623. FREDERICK JONES DUGGAN, of Bristol, in the County of Gloucester, Oil and Colour Merchant, for an invention for—"Improved methods of connecting lamp chimnies and other glasses or shades with the burners of lamps."
Provisional protection only.

MARULAZ. 30th June 1863.

1624. LOUIS FRANÇOIS AUGUSTE BARON MARULAZ, of Guéret Creuse, France, Commissary General Officer of the Legion of Honor, and Knight of the Order of Leopold, of Belgium, for an invention for—"Improvements in the manufacture of combs." *Provisional protection only.*

JENNINGS. LAVATER. 30th June 1863.

1625. JOSIAH GEORGE JENNINGS, of Palace Road, Lambeth, in the County of Surrey, Sanitary Engineer, and MANUEL LEOPOLD JONAS LAVATER, of Bath Street, Newgate Street, in the City of London, India-rubber Manufacturer, for an invention for—"Improvements in stoppers and lids or covers for jars, bottles and other vessels, also in closing and fastening other articles." *Letters Patent sealed.*

SIMPSON. 30th June 1863.

1626. JOSEPH SIMPSON, of Darlaston, in the County of Stafford, Bolt and Iron Hurdle and Fencing Manufacturer, for an invention for—"Certain improvements in iron hurdles and fencing." *Provisional protection only.*

JOHNSON. 30th June 1863.

1627. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus for moulding or shaping pottery ware."—*A communication to him from abroad by Robert Marcher, of New York, in the United States of America, Manufacturer.*
Provisional protection only.

RICHARDS. 30th June 1863.

1628. ALEXANDER KEENE RICHARDS, of Berners Street, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in ordnance and firearms, and in projectiles to be used therewith." *Letters Patent sealed.*

GARDNER. 30th June 1863.

1629. CHARLES HENRY GARDNER, of the firm of Hughes and Kimber, of West Harding Street, Fetter Lane, in the City of London, Lithographic Press Manufacturers, for an invention for—"Improvements in lithographic and zincographic presses."
Letters Patent sealed.

SILVESTER. 30th June 1863.

1630. ALFRED SILVESTER, of Clapham Road, in the County of Surrey, Photographer, for an invention for—"Improvements in apparatus to be used in the exhibition of dramatic and other like performances." *Letters Patent sealed.*

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COLE. 30th June 1863.

1631. SAMUEL COLE, of Moseley, in the County of Worcester, Manufacturer, for an invention for—"Improvements in clasps or fastenings for securing brooches, solitaires and other dress ornaments." *Letters Patent sealed.*

WILLIAMS. 1st July 1863.

1632. THOMAS WILLIAMS, of Aberdaron, in the County of Caernarvon, Engineer, for an invention for—"Improved arrangements for effecting or aiding in effecting the locomotion of land carriages or vehicles and floating vessels, by manual power or other primary motive agency." *Provisional protection* NOT *granted.*

BLAKE. 1st July 1863.

1633. JOHN BLAKE, of Accrington, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for reducing and regulating the pressure or quantity of steam, and in discharging the water of condensed steam from cylinders, pipes and other vessels." *Letters Patent sealed.*

ALLISTON. SWIFT. 1st July 1863.

1634. THOMAS ALLISTON, of No. 237, Euston Road, in the County of Middlesex, Iron Bedstead Maker, and RICHARD SWIFT, of No. 2, Hardy Terrace, Hounslow, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of and apparatus for manufacturing metallic joints for bedsteads, and the application of such joints to certain parts of bedsteads." *Provisional protection only.*

SNELL. 1st July 1863.

1635. WILLIAM SNELL, of 16, Clement's Inn, Strand, in the County of Middlesex, for an invention for—"An improved water-proof material."—*A communication to him from abroad by Jules Wiese, of 48, Rue de l'Arbre sec, Paris.*
Provisional protection only.

BOYLE. 1st July 1863.

1636. THOMAS BOYLE, of 31, Gray's Inn Road, London, in the County of Middlesex, Lighting and Ventilating Engineer, for an invention for—"An improved system of ventilation applicable to every description of dwelling place and building." *Letters Patent sealed.*

COLES. 1st July 1863.

1637. COWPER PHIPPS COLES, of Southsea, in the County of Hants, Captain in the Royal Navy, for an invention for—"An improved method of and apparatus for working guns in vessels and forts, and discharging them under water." *Letters Patent sealed.*

CLAPHAM. 1st July 1863.

1638. ROBERT CALVERT CLAPHAM, of Walker, in the County of Northumberland, Analytical Chemist, for an invention for—"Improvements in the manufacture of hyposulphite of soda, sulphite of soda, and sulphite of lime." *Provisional protection only.*

JOHNSON. 1st July 1863.

1639. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in coating or covering metal sheets with metals or alloys, and in the apparatus employed therein."—*A communication to him from abroad by Xavier Florentin Girard, of Paris, in the Empire of France.* *Letters Patent sealed.*

HARVEY. HARVEY. 1st July 1863.

1640. JOHN HARVEY, and JAMES SAMUEL HARVEY, both of Hanover Square, Newcastle-on-Tyne, Tobacco Manufacturers, for an invention for—"Improvements in machinery for cutting tobacco into cakes suitable for the press." *Letters Patent sealed.*

TAYLOR. 1st July 1863.

1641. THOMAS TAYLOR, of Wandsworth, in the County of Surrey, for an invention for—"Improvements in railway brakes." *Letters Patent sealed.*

HUTCHINSON. 1st July 1863.

1642. HIRAM HUTCHINSON, Merchant, of No. 26, Rue N^e Dame des Victoires, Paris, for an invention for—"Improvements in boots and shoes." *Letters Patent sealed.*

BOUSFIELD. 1st July 1863.

1643. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"A new and useful machine for preparing cotton, wool or other fibrous material."—*A communication to him from abroad by Cullen Whipple, a person resident at the City and County of Providence, in the State of Rhode Island, in the United States of America.*
Complete specification; Letters Patent sealed.

COLE. COLE. 1st July 1863.

1644. JAMES COLE, and JAMES COLE, junior, of Coventry, in the County of Warwick, Pattern Designers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

SHEDLOCK. 2nd July 1863.

1645. JAMES JOHN SHEDLOCK, of Vincent Street, Westminster, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in wet gas meters." *Letters Patent sealed.*

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BROOMAN. 2nd July 1863.	1646. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Certain compositions for protecting metals and metallic articles from oxidation, and for coating slate, bricks, pottery and ceramic ware."—*A communication to him from abroad by Camille, Baroness de Lavenant, residing at Paris, France.* *Letters Patent sealed.*
CROLL. 2nd July 1863.	1647. ALEXANDER ANGUS CROLL, of Coleman Street, in the City of London, Engineer, for an invention for—"Improvements in the preparation of materials to be used in the purification of gas for illumination." *Letters Patent sealed.*
LLOYD. 2nd July 1863.	1648. EDWARD LLOYD, of 22, Wells Street, in the Parish of Saint Marylebone, in the County of Middlesex, for an invention for—"An improved composition for waterproofing, softening, and preserving all kinds of leather and articles made therefrom." *Letters Patent sealed.*
MILLER. 2nd July 1863.	1649. WILLIAM MILLER, of No. 70, Upper Stamford Street, Blackfriars, in the County of Surrey, for an invention for—"An improved mode of evaporating through the combined agencies of heat and centrifugal force, and the machinery employed therein, more particularly applicable to saccharine solutions." *Provisional protection only.*
RANSOME. 2nd July 1863.	1650. FREDERICK RANSOME, of Ipswich, in the County of Suffolk, for an invention for—"Improvements in coating or preserving iron ships or vessels, or iron used for other purposes." *Letters Patent sealed.*
KING. 2nd July 1863.	1651. JOHN KING, of Chadshunt Farm, near Kineton, in the County of Warwick, for an invention for—"Improvements in fencing land and in hanging gates." *Letters Patent sealed.*
MARTIN. 3rd July 1863.	1652. CHARLES MARTIN, of Brentford, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the treatment and preparation of materials for the manufacture of paper." *Provisional protection only.*
BROADHEAD. MURDOCH. 3rd July 1863.	1653. HENRY BROADHEAD, Captain R.N., and GEORGE MURDOCH, Inspector of Machinery in the Royal Navy, both of Portsmouth, in the County of Hants, for an invention for—"Improvements in breech-loading ordnance and gun carriages." *Letters Patent sealed.*
NEWTON. 3rd July 1863.	1654. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the treatment and preservation of skins of all kinds."—*A communication to him from abroad by Leonard Laureau, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*
DAVISON. 3rd July 1863.	1655. ROBERT DAVISON, of London Street, in the City of London, Civil Engineer, for an invention for—"Improvements in machinery for decorticating and cleaning corn and other grain."—*A communication to him from abroad by Louis Basilide Sulpice Poissant, of Amiens, France.* *Letters Patent sealed.*
BAULCH. 3rd July 1863.	1656. CHARLES BAULCH, of the City of Bristol, Boot Manufacturer, for an invention for—"Improvements in the manufacture of boots and shoes." *Letters Patent sealed.*
BRINSMEAD. 3rd July 1863.	1657. HENRY BRINSMEAD, of Ipswich, in the County of Suffolk, for an invention for—"Improvements in cooking apparatus." *Letters Patent sealed.*
THOMAS. 3rd July 1863.	1658. HENRY THOMAS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in candlesticks." *Provisional protection only.*
WARNER. 3rd July 1863.	1659. HAMILTON SHIRLEY WARNER, of Trinidad, Gentleman, for an invention for—"An improved mode of and apparatus for treating or preparing megass and other substances to be used as fuel." *Letters Patent sealed.*
LELIOS. 3rd July 1863.	1660. EVANGELI LELIOS, of Threadneedle Street, in the City of London, for an invention for—"Improvements in the means of and apparatus for churning." *Provisional protection only.*
MACDONALD. CALVERLEY. 4th July 1863.	1661. JOHN CAMERON MACDONALD, of Waddon, near Croydon, in the County of Surrey, and JOSEPH CALVERLEY, of 26, George street, Peckham, in the same County, for an invention for—"Improvements in the manufacture and application of printing apparatus." *Letters Patent sealed.*

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EYTH.
4th July 1863.

1662. MICHEL EMILE EYTH, of No. 60, Boulevart de Strasbourg, Paris, France, Civil Engineer, for an invention for—"An improved rotative engine."
Letters Patent sealed.

McDONALD.
4th July 1863.

1663. JOHN McDONALD, of Ashton-under-Lyne, in the County of Lancaster, Manager, for an invention for—"Certain improvements in jacquard looms."
Letters Patent sealed.

FLUDE.
FARNDON.
4th July 1863.

1664. ROBERT FLUDE, and JOHN FARNDON, both of Aylestone Street, in the Town and County of Leicester, for an invention for—"Improvements in looms for weaving narrow fabrics."
Provisional protection only.

GIMSON.
4th July 1863.

1665. JOSIAH GIMSON, of the Town and County of Leicester, Engineer, for an invention for—"Improvements in shuttles for weaving narrow fabrics, and in mounting and fitting them to the battens."
Letters Patent sealed.

BONNEVILLE.
4th July 1863.

1666. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in steam-engines."—*A communication from Auguste Ghilain and Edouard Poncelet, persons resident at Liége, in the Kingdom of Belgium.*
Letters Patent sealed; no specification filed.

BONNEVILLE.
4th July 1863.

1667. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"An improved machine constructed on self-moving principles for obtaining motive power."—*A communication from Jules François Duhamel, a person now residing at 24, Rue du Mont Thabor, in the City of Paris, and Empire of France, aforesaid.*
Complete specification; protection for SIX *months only.*

BONNEVILLE.
4th July 1863.

1668. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of telegraphic wires, and in the apparatus connected therewith."—*A communication from Gustave Eugène Michel Gerard, Manufacturer, a person resident at 24, Rue du Mont Thabor, in the City of Paris, and Empire of France, aforesaid.*
Complete specification; Letters Patent sealed.

NORMAN.
4th July 1863.

1669. ALFRED NORMAN, of Clarendon Road, Notting Hill, in the County of Middlesex, Gentleman, for an invention for—"An improved apparatus for fanning or for agitating air."
Provisional protection only.

OXLEY.
4th July 1863.

1670. JAMES OXLEY, of Frome, in the County of Somerset, Back Maker and Engineer, for an invention for—"Improvements in filtering apparatus."
Letters Patent sealed.

BARRETT.
EXALL.
ANDREWES.
BARRETT.
BOWHAY.
4th July 1863.

1671. GEORGE ALLAM BARRETT, WILLIAM EXALL, CHARLES JAMES ANDREWES, and ALFRED BARRETT, all of Reading, in the County of Berks, Engineers, and JOHN LEAKEY BOWHAY, of Modbury, in the County of Devon, for an invention for—"Improvements in the arrangement and construction of fixed and portable combined thrashing machines."
Letters Patent sealed.

GOWER.
GOWER.
6th July 1863.

1672. ANDREW GOWER, of Market Drayton, in the County of Shropshire, and BENJAMIN SMYTH GOWER, of the same place, Agricultural Engineers, for an invention for—"An improved sowing and harrowing machine."
Letters Patent sealed.

SAMUEL.
6th July 1863.

1673. JAMES SAMUEL, of No. 26, Great George Street, Westminster, Civil Engineer, for an invention for—"Improvements in the manufacture of gas for lighting and heating purposes, and in apparatus connected therewith."
Provisional protection only.

ADAMS.
6th July 1863.

1674. WILLIAM BRIDGES ADAMS, of Holly Mount, Hampstead, in the County of Middlesex, Engineer, for an invention for—"Improvements in wheels and their tires, axles and axle boxes."
Provisional protection only.

COULDERY.
6th July 1863.

1675. THOMAS WILLIAM COULDERY, of Old Kent Road, in the County of Surrey, for an invention for—"Improved means of attaching boxes or receptacles to hold soap, black lead or similar household articles, to the sides of wash tubs, pails, or house boxes."
Provisional protection only.

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CROFT. 6th July 1863.

1676. JOHN MCGRIGOR CROFT, of No. 8, Abbey Road, Saint John's Wood, in the County of Middlesex, Doctor of Medicine, for an invention for—"Improvements in propellers for propelling vessels." *Letters Patent sealed.*

COOKE. 6th July 1863.

1677. SAMUEL JOHN COOKE, of No. 2, St. Michael's House, Cornhill, in the City of London, for an invention for—"Improvements in apparatus for supplying carbonic acid gas to casks or other vessels containing beer or other fermented liquid." —*A communication to him from abroad by James Harrison, a person resident at Geelong.* *Provisional protection only.*

CAUNTER. 6th July 1863.

1678. HENRY CAUNTER, of Stornoway, in the Island of Lewis, and County of Ross, for an invention for—"An improved lubricating matter or composition." *Provisional protection only.*

BONFIELD. 6th July 1863.

1679. BENJAMIN BONFIELD, of Forest Hill, in the County of Kent, Commercial Traveller, for an invention for—"Improvements in stoppers for bottles." *Provisional protection only.*

COLLYER. 6th July 1863.

1680. GEORGE CLAYTON COLLYER, of 152, St. George's Street, East, in the County of Middlesex, Tobacconist, for an invention for—"Improvements in the treatment of cut tobacco for its better preservation." *Letters Patent sealed.*

SCHIELE. 7th July 1863.

1681. CHRISTIAN SCHIELE, of No. 20, Milton Street, in the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in turbines." *Letters Patent sealed and specification filed by order.*

GUICHARD. LEFEBVRE. 7th July 1863.

1682. LOUIS JOSEPH GUICHARD, and GERMAIN FRANÇOIS JOSEPH LEFEBVRE, of 10, Rue de la Fidélité, Paris, in the Empire of France, for an invention for—"Improvements in lamps, and in the wicks used in such lamps." *Provisional protection only.*

BRUCE. 7th July 1863.

1683. WILLIAM SQUIRE BRUCE, of Great St. Helen's, Bishopsgate Street, in the County of Middlesex, for an invention for—"Improvements in lucifer matches, fusees and other similar lights, and in the boxes or holders for containing the same." —*A communication to him from abroad by Thomas Jordery, of Paris, in the Empire of France.* *Letters Patent sealed.*

EDWARDS. 7th July 1863.

1684. ELIEZER EDWARDS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in instruments or apparatus to be used in the manufacture of glass finger plates and other articles made of glass, and in kilns for annealing articles made of glass." *Letters Patent sealed.*

BARTHOLOMEW. 7th July 1863.

1685. GEORGE BARTHOLOMEW, of the Town and County of the Town of Linlithgow, North Britain, Edge Tool Maker, for an invention for—"Improvements in shoes for the feet of horses and other animals, and in the means of connecting them." *Provisional protection only.*

ORR. 7th July 1863.

1686. JOHN ORR, of Kidderminster, in the County of Worcester, Manager, for an invention for—"Improvements in weaving piled and other fabrics, and in the machinery or apparatus connected therewith." *Provisional protection only.*

GEDGE. 7th July 1863.

1687. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the construction of seats, chairs, sofas, lounges, and other similar articles of furniture."—*A communication to him from abroad by François Carré, of the Rue du Faubourg Saint Martin, Paris, France.* *Letters Patent sealed.*

GEDGE. 7th July 1863.

1688. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for milking."—*A communication to him from abroad by Louis Grasset, of No. 15, Passage des Petites Ecuries, Paris, France, Tinman.* *Letters Patent sealed.*

ROBINSON. 7th July 1863.

1689. SAMUEL ROBINSON, of No. 129, Great Brunswick Street, in the City of Dublin, for an invention for—"Improvements in spring hinges for swing doors." *Letters Patent sealed.*

REED. 7th July 1863.

1690. GEORGE POTTER REED, of the State of Massachusetts, of the United States of America, for an invention for—"Certain new and useful improvements in watches or time-keepers." *Complete specification; Letters Patent sealed.*

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MYERS. FORBES. 8th July 1863.

1691. EDWARD MYERS, of 2, Millbank Row, County of Middlesex, Civil Engineer, and HUGH FORBES, of 6, Aberdeen Place, Maida Hill, County of Middlesex, for an invention for—"An improved method of propelling and steering ships."
Letters Patent sealed.

HASELTINE. 8th July 1863.

1692. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in brick machines."—*A communication to him from abroad by Isaac Gregg, of Philadelphia, Pennsylvania, United States of America.*
Letters Patent sealed.

BASFORD. 8th July 1863.

1693. WILLIAM BASFORD, of Pewsey, in the County of Wilts, Engineer, for an invention for—"Improvements in apparatus for generating and purifying gas made from coal or other bituminous substances."
Letters Patent sealed.

ELY. 8th July 1863.

1694. FREDERICK ELY, of Totton, Southampton, for an invention for—"An improved composition applicable to corn plasters."
Provisional protection only.

ARMSTRONG. 8th July 1863.

1695. HENRY ARMSTRONG, of Whitby, in the County of York, Alum Manufacturer, for an invention for—"Improvements in the manufacture of alum."
Provisional protection only.

GIBSON. TRULOCK. TRULOCK. TRULOCK. 8th July 1863.

1696. JOHN GIBSON, of 31, Ormond Quay, SAMUEL TRULOCK, of Essex Quay, RICHARD TRULOCK, of Essex Quay, and WILLIAM TRULOCK, of Essex Quay, all in the City of Dublin, for an invention for—"Improvements in breech-loading fire-arms.
Provisional protection only.

DE FONTAINE MOREAU. 8th July 1863.

1697. PETER ARMAND LECOMTE DE FONTAINE MOREAU, of 10, Rue de la Fidélité, Paris, and 4, South Street, Finsbury, London, Patent Agent, for an invention for—"A new mode of roofing houses, buildings and other structures."—*A communication to him from abroad by Messrs. Gadnel, Boisserane and Garnier, of Paris, France.*
Provisional protection only.

PREECE. 8th July 1863.

1698. THOMAS PREECE, of Leominster, in the County of Hereford, Implement Maker, for an invention for—"An improved corn and seed drill."
Letters Patent sealed.

SOUTHBY. 8th July 1863.

1699. ANTHONY GAPPER SOUTHBY, of Bulford, in the County of Wilts, Engineer, for an invention for—"Improvements in diverse lamps."
Letters Patent sealed.

TALLERMAN. TALLERMAN. 8th July 1863.

1700. REBECCA TALLERMAN, and LEWIS ABRAHAM TALLERMAN, both of 131, Bishopsgate Street Without, in the City of London, for an invention for—"A new method of waterproofing and ventilating boots, shoes and slippers, for preventing wet and damp feet."
Provisional protection only.

HASELTINE. 8th July 1863.

1701. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in lever horse power machines, the cog gearing employed being applicable to other machines."—*A communication to him from abroad by Cyrus Avery, of Philadelphia, Pennsylvania, United States.*
Complete specification; Letters Patent sealed.

NEWTON. 8th July 1863.

1702. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of locks and fastenings."—*A communication to him from abroad by Randolph Foster, of Ling-Ling, in the State of New York, United States of America.*
Letters Patent sealed.

CUNNINGHAM. 8th July 1863.

1703. HENRY DUNCAN PRESTON CUNNINGHAM, of Bury, in the County of Hants, Esquire, for an invention for—"Improvements in working guns and in matters relating thereto."
Provisional protection only.

THOMAS. 8th July 1863.

1704. JOHN THOMAS, of Battersea, in the County of Surrey, Ironfounder, for an invention for—"Improvements in treating ores and earths containing iron, in order to obtain the metal therefrom."
Letters Patent sealed

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DAVIS. 9th July 1863.

1705. SAMUEL DAVIS, of 33, Strand, in the County of Middlesex, Saddler and Harness Manufacturer, for an invention for—"An improved 'anatomical' bit for horses or other animals."—*A communication to him from abroad by Henry Theodor Romertze, of Philadelphia, Pennsylvania, United States of America.*
Provisional protection only.

SMITH. CHEASE. 9th July 1863.

1706. JAMES SMITH, of Barkeley House, Seaforth, near Liverpool, in the County of Lancaster, and SYDNEY ARTHUR CHEASE, of Egremont, in the County of Chester, for an invention for—"A new description of hydraulic engine for raising water and other fluids above their common level, the fluids so raised to be used as a motive-power."
Letters Patent sealed.

WILLIAMS. 9th July 1863.

1707. WELLINGTON WILLIAMS, of Gutter Lane, Cheapside, in the City of London, for an invention for—"Improvements in shirt collars and boys' and ladies' collars."
Provisional protection only.

PHILLIPSON. BOND. 9th July 1863.

1708. RICHARD PHILLIPSON, and WILLIAM BOND, of Accrington, in the County of Lancaster, Overlookers of Power Looms, for an invention for—"Improvements in temples for looms."
Provisional protection only.

BROOMAN. 9th July 1863.

1709. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in ships and in propelling the same."—*A communication to him from abroad by Auguste Salzmann, of Paris, France.*
Letters Patent sealed.

WESTMACOTT. 9th July 1863.

1710. PERCY GRAHAM BUCHANAN WESTMACOTT, of Newcastle-upon-Tyne, Civil Engineer, for an invention for—"Improvements in cranes and in dock-gate and other crabs."
Letters Patent sealed.

DELANY. OKES. 9th July 1863.

1711. JOSEPH FRANCIS DELANY, and JOHN CHARLES RAYMOND OKES, of Victoria Foundry, Greenwich, in the County of Kent, for an invention for—"Improvements in the pistons of steam-engines."
Provisional protection only.

WESTMACOTT. 9th July 1863.

1712. PERCY GRAHAM BUCHANAN WESTMACOTT, of Newcastle-upon-Tyne, Civil Engineer, for an invention for—"Improvements in hydraulic engines."
Letters Patent sealed.

WILSON. 9th July 1863.

1713. WILLIAM VIRGO WILSON, of Jubilee Street, Mile End, in the County of Middlesex, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of red colouring matter."
Provisional protection only.

AGATE. 9th July 1863.

1714. ROBERT AGATE, of Hornsey, in the County of Middlesex, Plumber and Builder, for an invention for—"Improvements in the construction of skylights and roof lights for railway stations, conservatories and other similar structures."
Letters Patent sealed.

NEWTON. 9th July 1863.

1715. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in barometers or gauges for measuring the pressure of fluids."—*A communication to him from abroad by Felix Richard, of Rue St. Sebastien, Paris, in the Empire of France.*
Letters Patent sealed.

TENT. 9th July 1863.

1716. WILLIAM TENT, of Birchin Lane, in the City of London, Glover and Hosier, for an invention for—"Improvements in pins or hooks for suspending fabrics, dresses or parts of dresses, curtains and other articles of upholstery or apparel."
Provisional protection only.

GOWLAND. 9th July 1863.

1717. GEORGE GOWLAND, of Liverpool, in the County of Lancaster, Chronometer Maker, for an invention for—"Improvements in the construction and arrangement of nautical and surveying instruments for measuring angles and altitudes."
Provisional protection only.

TASKER. 9th July 1863.

1718. WILLIAM TASKER, the younger, of the Waterloo Iron Works, near Andover, in the County of Hants, Agricultural Engineer, for an invention for—"Improvements in thrashing machines."
Letters Patent sealed.

GODEFROY. 10th July 1863.

1719. PETER AUGUSTIN GODEFROY, of No. 7, Shepherd's Lane, Homerton, in the County of Middlesex, Operative Chemist, for an invention for—"Improvements in the mode of purifying oils."
Provisional protection only.

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JOHNSTON. 10th July 1863.

1720. ALEXANDER ROBERT JOHNSTON, of the Grove, Yoxford, in the County of Suffolk, Gentleman, for an invention for—"An improved portable fence for sheep and cattle pens or for other enclosures." *Letters Patent sealed.*

MENNONS. 10th July 1863.

1721. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of Abingdon Chambers, in the City of Westminster, and 24, Rue de Dunkerque, Paris, in the Empire of France, for an invention for—"Improvements in the mode of preserving and protecting the silvering of mirrors."—*A communication from Diodor Briansky (late Captain in the Russian Army), a person resident at No. 16, Malaïa Morskaïa, St. Petersburg.* *Letters Patent sealed.*

SHEDLOCK. 10th July 1863.

1722. JAMES JOHN SHEDLOCK, of No. 12, Abingdon Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the construction of soil pits, and in the mode of emptying the same."—*A communication from Adolphe Kolb and Théodore De Lécenhagen, persons resident at No. 24, Rue de Dunkerque, Paris, in the Empire of France.* *Provisional protection only.*

DE BERGUE. 10th July 1863.

1723. CHARLES DE BERGUE, of Strangeways Works, Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in piles for foundations, and in piers for bridges and other buildings or structures." *Letters Patent sealed.*

CLARKE. 10th July 1863.

1724. WILLIAM CLARKE, of Forest Road, Nottingham, Lace Manufacturer, for an invention for—"Improvements in the manufacture of ornamental lace." *Letters Patent sealed; no specification filed.*

LEGG. GRIFFITH. 10th July 1863.

1725. THOMAS LEGG, of Northampton Square, in the County of Middlesex, Machinist, and RICHARD GRIFFITH, of Exmouth Street, in the County of Middlesex, Machinist, for an invention for—"Improvements in the construction of sewing machines." *Provisional protection only.*

HORNSBY. BONNALL ASTBURY. 10th July 1863.

1726. RICHARD HORNSBY, junior, JOHN BONNALL, and WILLIAM ASTBURY, all of Spittlegate Iron Works, Grantham, in the County of Lincoln, for an invention for—"Improvements in traction engines, and in apparatus for ploughing and tilling land by steam and other power, part of which improvements is also applicable to driving or giving motion to machinery." *Letters Patent sealed.*

JONES. 10th July 1863.

1727. WILLIAM EDWARD JONES, of No. 22, Wellington Road, Clapham, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in the permanent way of railways." *Provisional protection only.*

HENDERSON. 10th July 1863.

1728. WILLIAM HENDERSON, of Kensington, in the County of Middlesex, Chemist, for an invention for—"Improvements in treating ores and other substances containing iron, in the manufacture of iron, steel and alloys of iron, and of a purifying and deoxidizing agent therefrom, also in the construction of retorts or kilns for treating the said ores and substances." *Letters Patent sealed.*

BOURQUIN. 10th July 1863.

1729. JOHN PETER BOURQUIN, of Newman Street, Oxford Street, in the County of Middlesex, Manufacturer of Photographic Goods, for an invention for—"An improved construction of rolling press." *Provisional protection only.*

CAMPBELL. 10th July 1863.

1730. JAMES CAMPBELL, of Silvertown, in the County of Essex, Contractor, for an invention for—"Improvements in the permanent way of railways, and in supporting the rails thereof." *Provisional protection only.*

HAWTHORN. HAWTHORN. 10th July 1863.

1731. ROBERT HAWTHORN, and WILLIAM HAWTHORN, both of the Town and County of Newcastle-upon-Tyne, Engineers, for an invention for—"Improvements in the working of railways." *Letters Patent sealed.*

STILLE. 10th July 1863.

1732. LUDWIG STILLE, of 7, Great Castle Street, Regent Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction and arrangement of galvanic batteries, and in the utilization of products resulting therefrom." *Provisional protection not granted.*

CHATTAWAY. 11th July 1863.

1733. EDWIN DANIEL CHATTAWAY, of New Broad Street, in the City of London, Engineer, for an invention for—"Improvements in railway signals." *Letters Patent sealed.*

RUTHVEN. 11th July 1863.

1734. MORRIS WEST RUTHVEN, of 72, Oxford Terrace, Hyde Park, in the County of Middlesex, Engineer, for an invention for—"Improvements in rudders or apparatus for steering vessels." *Letters Patent sealed.*

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DIXON. PUMPHREY. 11th July 1863.

1735. ADAM DIXON, of Harborne, in the County of Stafford, Engineer, and JOSIAH PUMPHREY, of Birmingham, in the County of Warwick, Machinist, for an invention for—"A new fastener or holder for flowers or other decorations to coats and articles of dress." *Provisional protection only.*

ORR. BRINTON. LEWIS. 11th July 1863.

1736. JOHN ORR, of Kidderminster, in the County of Worcester, and JOHN BRINTON, and JOHN LEWIS, of the firm of Brinton and Lewis, of the same place, Carpet Manufacturers, for an invention for—"Improvements in weaving 'chenille' and in the machinery or apparatus connected therewith." *Letters Patent sealed.*

BARNES. 11th July 1863.

1737. JOHN BARNES, of the Town and County of the Town of Nottingham, Mechanic, for an invention for—"A new machine for clipping off connecting threads in the manufacture of lace." *Provisional protection only.*

BROOMAN. 11th July 1863.

1738. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in cartridges for breech-loading arms."—*A communication to him from abroad by Alfred Isidore Honoré Parent, of Paris, France.* *Letters Patent sealed.*

GREAVES. 11th July 1863.

1739. HUGH GREAVES, of Abingdon Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the construction of railways and tramways. *Letters Patent sealed.*

MORTIMER. 13th July 1863.

1740. JAMES MORTIMER, of Hoxton Hall, High Street, Hoxton, and of 47, Gresham Street, E.C., both in the County of Middlesex, Architect and Builder of improved Separate Dwellings for all Classes of all Nations, for an invention for—"Improvements in the construction and arrangement of dwelling houses in combination with the means employed for ventilating the same." *Letters Patent sealed.*

DWYER. 13th July 1863.

1741. ROBERT DOYNE DWYER, of Warrington, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction of vents for casks and other vessels." *Provisional protection only.*

COULTER. 13th July 1863.

1742. HENRY COULTER, of Liverpool, in the County of Lancaster, Lamp Manufacturer, for an invention for—"Improvements in the burners of hydro-carbon and other fluid burning lamps. *Provisional protection only.*

DWYER. 13th July 1863.

1743. ROBERT DOYNE DWYER, of Warrington, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction of letter copying presses." *Provisional protection only.*

KING. 13th July 1863.

1744. HORATIO NELSON KING, of No. 42A, Milsom Street, in the City of Bath, Photographic Artist, for an invention for—"An improved mode of and apparatus for producing spectral illusions on the stage." *Provisional protection only.*

BARTON. 13th July 1863.

1745. JOSEPH BARTON, of Alfreton, in the County of Derby, Colliery Manager and Coal Merchant, for an invention for—"An improved guard or fence for coal, iron, stone or other pits, warehouse or other lifts, sack-holes or other places requiring a guard or fence." *Provisional protection only.*

WALKER. 13th July 1863.

1746. ROBERT STOCKS WALKER, of High Street, Wapping, in the County of Middlesex, Ship Surveyor, for an invention for—"Improvements in sheathing or coating iron ships." *Provisional protection only.*

BARBER. 13th July 1863.

1747. GEORGE HENRY BARBER, of the Town and County of the Town of Southampton, Accountant, for an invention for—"An improved calendar or date denoting apparatus." *Provisional protection only.*

LAING. 13th July 1863.

1748. JAMES LAING, of No. 80, George Street, in the City of Manchester, in the County of Lancaster, Drysalter, for an invention for—"Improvements in dyeing and printing."—*A communication to him from abroad by Nicholas Rave, aîné, of Brussels, in the Kingdom of Belgium, Dyer.* *Letters Patent sealed.*

BROOMAN. 13th July 1863.

1749. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for suspending chandeliers, gaseliers and other weights."—*A communication to him from abroad by Eugene Frederic Piat and Theodore Auguste Baudrit, both of Paris, France.* *Letters Patent sealed.*

BROOMAN. 13th July 1863.

1750. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in sizeing or gumming warp and weft threads."—*A communication to him from abroad by Stanislas Vigoureux, of Paris, France.* *Letters Patent sealed.*

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IODOCIUS. 13th July 1863.

1751. PIERRE CHARLES ALEXANDRE IODOCIUS, of Dunkerque, in the Empire of France, Merchant, for an invention for—"Improvements in fishing, and in the apparatus or means to be employed therein."—*A communication to him from abroad by John d'Atouquia de Franca-Netto, of St. Petersburg, in the Empire of Russia, Civil Engineer.* *Letters Patent sealed.*

BONNEVILLE. 13th July 1863.

1752. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"Improvements in certain descriptions of breech-loading fire-arms."—*A communication from Adolphe Jean Victor Marcet, a person resident at 24, Rue du Mont Thabor, Paris, in the Empire of France.*
Complete specification; Letters Patent sealed.

BOURNIQUE. VIDARD. 14th July 1863.

1753. LOUIS MARCEL BOURNIQUE, Mechanician, and JEAN BAPTISTE VIDARD Engineer, at Paris, in the French Empire, for an invention for—"Certain improvements in railway carriages." *Letters Patent sealed.*

BOURNIQUE. VIDARD. 14th July 1863.

1754. LOUIS MARCEL BOURNIQUE, Mechanician, and JEAN BAPTISTE VIDARD, Engineer, both of Paris, in the French Empire, for an invention for—"An improved waggon or truck to be used on railways." *Letters Patent sealed.*

COOPER. 14th July 1863.

1755. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in sights for rifles and other fire-arms." *Provisional protection only.*

OPPERMANN. 14th July 1863.

1756. CARL OPPERMANN, of King's Road, Peckham, in the County of Surrey, Chronometer Manufacturer, for an invention for—"Improvements in means or apparatus to facilitate the connecting and disconnecting horses and other animals with carriages." *Provisional protection only.*

COOKE. 14th July 1863.

1757. JOHN THOMAS COOKE, of Leicester, Batten Maker, for an invention for—"Improvements in and connected with battens for driving shuttles from side to side of their work in weaving." *Provisional protection only.*

HOLMES. HOLMES. HOLMES. 14th July 1863.

1758. JAMES HOLMES, GEORGE THOMAS HOLMES, and FREDERICK ROBERT HOLMES, of the City of Norwich, Agricultural Engineers, for an invention for—"Improvements in threshing and dressing machines." *Letters Patent sealed.*

SAXON. 14th July 1863.

1759. GEORGE SAXON, of Openshaw, in the County of Lancaster, Engineer, for an invention for—"Improvements in metallic pistons." *Provisional protection only.*

DAVISON. 14th July 1863.

1760. JAMES DAVISON, of Southwick, near Sunderland, in the County of Durham, for an invention for—"Improvements in furnaces for boilers, smelting and other useful purposes." *Letters Patent sealed.*

HORNSBY. PHILLIPS. 14th July 1863.

1761. RICHARD HORNSBY, junior, and JAMES EDWIN PHILLIPS, both of Spittlegate Iron Works, Grantham, in the County of Lincoln, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

WOOD. 14th July 1863.

1762. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in 'warping' or covering land, bog or peat with earth or soil." *Letters Patent sealed.*

SONSTADT. 14th July 1863.

1763. EDWARD SONSTADT, of Loughborough, in the County of Leicester, for an invention for—"Improvements in the manufacture of sodium." *Letters Patent sealed.*

ROBERTS. 14th July 1863.

1764. WILLIAM ROBERTS, of Lylands, Twyford, near Winchester, in the County of Hants, Farmer, for an invention for—"Improvements in ploughs." *Provisional protection only.*

TODD. 14th July 1863.

1765. JAMES LOGAN TODD, of Belfast, in the County of Antrim, in Ireland, Engineer and Mechanic, for an invention for—"Improvements applicable to the rollers of machines employed for spinning fibrous materials whilst in a wet state." *Provisional protection only.*

SLATER. 14th July 1863.

1766. JAMES SLATER, of Derby Villas, Park Row, Plaistow, in the County of Essex, Engineer, for an invention for—"Improved machinery for compressing bricks, tiles and other plastic materials." *Letters Patent sealed.*

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FUNNELL. 15th July 1863.

1767. EDWARD FUNNELL, of Brighton, in the County of Sussex, Watch and Clock Maker, for an invention for—"A self-acting electro-magnetic clock work signal for railway purposes." *Letters Patent sealed.*

WIMPENNY. 15th July 1863.

1768. THOMAS WIMPENNY, of Holmfirth, in the County of York, Manufacturer, for an invention for—"Certain improvements in machinery or apparatus for roving and spinning wool, cotton and other fibrous substances." *Letters Patent sealed.*

WRIGHT. 15th July 1863.

1769. DAVID PITCAIRN WRIGHT, of 14, Portland Square, Bristol, for an invention for—"Attaching the burners of paraffine and other lamps to the founts or oil containers." *Provisional protection* NOT *granted.*

CHEETHAM. 15th July 1863.

1770. WILLIAM THOMAS CHEETHAM, of Ashton-under-Lyne, in the County of Lancaster, Mechanical Draughtsman, for an invention for—"Improvements in obtaining hydraulic motive-power." *Letters Patent sealed.*

CLARK. 15th July 1863.

1771. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improved process for making paper transparent and transferring designs."—*A communication to him from abroad by Henry Loewenberg, of New York City, and Henry Schoonmaker, of Brooklyn, in the County of Kings and State of New York, United States of America.* *Letters Patent sealed.*

DUJARDIN. 15th July 1863.

1772. PIERRE ANTOINE JOSEPH DUJARDIN, of 29, Boulevart St. Martin, Paris, in the Empire of France, Physician, for an invention for—"Improvements in electric telegraphs." *Letters Patent sealed.*

HENRY. 15th July 1863.

1773. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in figuring, ornamenting and coloring fulled and felted fabrics and articles."—*A communication to him from abroad by the Société Troty Latouche, frères, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed*

BROOMAN. 15th July 1863.

1774. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improved means of and apparatus for reducing charcoal and other friable substances to fine or impalpable powder, particularly applicable to the manufacture of a substitute for lamp black."—*A communication to him from abroad by Johan Ephraim Lundgren, of Stockholm, Sweden.* *Letters Patent sealed.*

BROOMAN. 15th July 1863.

1775. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for telegraphing by electricity."—*A communication to him from abroad by Woldemar Stroubinsky, of St. Petersburg, Russia.* *Provisional protection only.*

CLEMM. 15th July 1863.

1776. DOCTOR CHRISTIAN GUSTAV CLEMM, of Dresden, in the Kingdom of Saxony, Germany, for an invention for—"New employment of magnesia and its combinations in manufactures." *Letters Patent sealed.*

TAMET. 15th July 1863.

1777. DOMINIQUE TAMET, of No. 103, Vieille Route à Neuilly-sur-Seine (Empire Français) in the Empire of France, for an invention for—"Improvements in breakwaters and in the construction of rail and other ways thereon." *Letters Patent sealed.*

MÈGE. 16th July 1863.

1778. HYPOLITE MÈGE, of 10, Rue de la Fidélité, Paris, Professor of Chemistry, for an invention for—"Certain improvements in the mode of treating fatty bodies." *Letters Patent sealed.*

WATSON. 16th July 1863.

1779. ANDREW WATSON, of Glasgow, in the County of Lanark, North Britain, Ironfounder and Stove Grate Manufacturer, for an invention for—"Improvements in cooking ranges." *Provisional protection only.*

COOPER. 16th July 1863.

1780. SAMUEL AYLETT COOPER, Packing Case Maker, of No. 5, Lower Chapman Street, in the Parish of St. George's East, in the County of Middlesex, for an invention for—"An improved packing case to contain bottled beer, wine or any other liquid in bottle." *Provisional protection only.*

TAYLOR. AUSTIN. 16th July 1863.

1781. JOSEPH NEEDHAM TAYLOR, of Brixton, in the County of Surrey, retired Admiral, and WILLIAM AUSTIN, late of Holywell Street, in the City of Westminster, and now of Milford, South Wales, Civil Engineer, for an invention for—"Improvements in the construction of ships and other floating bodies." *Letters Patent sealed.*

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ELLIOTT. 6th July 1863.

1782. HENRY ELLIOTT, of Birmingham, in the County of Warwick, Gunmaker, for an invention for—"Improvements in breech-loading fire arms."
Letters Patent sealed.

PRIESTLEY. TODD. 16th July 1863.

1783. LISTER PRIESTLEY, of Bradford, in the County of York, and JOSEPH LONGLEY TODD, of Morley, also in the County of York, for an invention for—"Improvements in the manufacture of elastic boots and shoes and in apparatus used therefor." *Provisional protection only.*

BODMER. 16th July 1863.

1784. LOUIS RUDOLPH BODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"The manufacture of a new product from peat and peat tar."—*A communication to him from abroad by Edmund Hess, of the Ostracher Ried Company, Pfrungen, in the Kingdom of Wurtemberg.*" *Letters Patent sealed.*

STOKES. 16th July 1863

1785. CHARLES STOKES, of Leigh Sinton, in the County of Worcester, Saddler, for an invention for—"An improved expanding and contracting horse collar."
Letters Patent sealed.

RAND. 16th July 1863.

1786. GEORGE RAND, of Stoneham, in the County of Hants, for an invention for —"Improvements in the means of and apparatus for boiling and cooking."
Letters Patent sealed.

LAMB. TOVEY. 16th July 1863.

1787. JOHN LAMB, of Kidderminster, in the County of Worcester, Machinist, and SAMUEL TOVEY, of the same place, Auctioneer, for an invention for—"Improvements in looms for weaving carpets." *Letters Patent sealed.*

MONTLEART. TENT. 16th July 1863.

1788. AGATHA MONTLEART, of Mildmay Park, in the County of Middlesex, Widow, and WILLIAM TENT, of Birchin Lane, in the City of London, Glover and Hosier, for an invention for—"An improved mode of attaching hooks to furniture or fabrics for suspending dresses or parts of dresses, fabrics, curtains and other articles of upholstery or apparel." *Letters Patent sealed.*

LAMBERT. 16th July 1863.

1789. BENJAMIN LAMBERT, of No. 35, Lothian Road, Camberwell New Road, in the County of Surrey, for an invention for—"Improvements in the preparation of waste paper in order to its being again used in the manufacture of paper."
Letters Patent sealed.

WAKEFIELD. 16th July 1863.

1790. OBED WAKEFIELD, of No. 10, Union Place, Lambeth Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in cocks or taps."
Provisional protection only.

THOMPSON. 16th July 1863.

1791. NATHAN THOMPSON, of No. 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in boat-building and in machinery for shaping wood therefor." *Letters Patent sealed.*

MAW. 16th July 1863.

1792. EDWIN MAW, of Leamington, in the County of Warwick, for an invention for—"Improvements in the manufacture of pillars, posts, columns, mouldings and buildings when corrugated metal is employed, and in machinery used in corrugating, moulding and shaping metal for such purposes." *Provisional protection only.*

SEDLEY. 17th July 1863.

1793. ANGELO JAMES SEDLEY, of No. 210, Regent Street, London, W., in the County of Middlesex, Upholsterer, for an invention for—"Improvements in the canopies of bedsteads of metal or wood or both combined, and other articles of furniture used to sit or recline upon." *Provisional protection only.*

DURST-WILD. 17th July 1863.

1794. ANNE CATHERINE, VEUVE DURST-WILD, of Paris, France, for an invention for—"An improved mode of producing raised patterns, figures or devices on felt hats, caps and bonnets." *Provisional protection* NOT *granted.*

DARRIEUX. 17th July 1863.

1795. JEAN DARRIEUX, of Cauderan, in the Department of Gironde, in the Empire of France, Merchant, for an invention for—"Pounded glass powder used for cleaning metals and also for tooth powder." *Provisional protection only.*

LEPOUTRE. 17th July 1863.

1796. FELIX LEPOUTRE, of Tourcoing, in the Department of the Nord, in the Empire of France, Manufacturer, for an invention for—"A new mechanical sector applicable to all self-acting machinery used for spinning textile fabrics."
Letters Patent sealed.

JOHNSON. 17th July 1863.

1797. THOMAS JOHNSON, of Hadleigh, in the County of Suffolk, Engineer, for an invention for—"Improvements in machinery for washing and cleansing casks."
Letters Patent sealed.

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ALCAN. 17th July 1863.	**1798.** EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"An improvement in gas-burners."—*A communication to him from abroad by Adolph Bay, Manager of the Belgian Compressed Gas Company, at Molenbeck, Belgium.* *Provisional protection only.*
BROOMAN. 17th July 1863.	**1799.** RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved varnish for preserving metal and wood."—*A communication to him from abroad by Messieurs Chaumont and Company, of Paris, France.* *Provisional protection only.*
WILSON. PAYNE. 17th July 1863.	**1800.** GEORGE FERGUSSON WILSON, and GEORGE PAYNE, both of Sherwood Works, Battersea, in the County of Surrey, for an invention for—"Improvements in the manufacture of soap." *Letters Patent sealed.*
COENEN. 17th July 1863.	**1801.** RICHARD COENEN, of 19, Old Broad Street, in the City of London, Silk Merchant, for an invention for—"Improvements in machinery for winding, measuring and sizing silk."—*A communication to him from abroad by Emile Duesigneur, of Lyons, in the French Empire.* *Letters Patent sealed.*
JOHNSON. 17th July 1863.	**1802.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machine knitting needles and in machinery or apparatus for making the same."—*A communication to him from abroad by Thomas Sands, of Gilford, in the State of New Hampshire, in the United States of America.* *Letters Patent sealed.*
CLARK. 18th July 1863.	**1803.** ALEXANDER CLARK, of Gate Street, Lincoln's Inn Fields, in the County of Middlesex, Engineer, for an invention for—"Improvements in revolving shutters and blinds, and in apparatus for the manufacture of the same." *Letters Patent sealed.*
PAGE. 18th July 1863.	**1804.** WILLIAM CHARLES PAGE, of Gabrick Street, Millwall, in the County of Middlesex, Engine Driver, for an invention for—"An improved mode of preventing and removing the incrustations in marine and land steam-boilers." *Provisional protection only.*
HOLBOROW. PARKER. 18th July 1863.	**1805.** ETHELBERT HOLBOROW, of Buckingham Street, Fitzroy Square, and ISAAC PARKER, of Houghton Street, Clare Market, both in the County of Middlesex, for an invention for—"Improvements in the construction of 'sights' for fire-arms." *Provisional protection only.*
MURDOCH. 18th July 1863.	**1806.** GEORGE MURDOCH, of Portsmouth, in the County of Hants, for an invention for—"Improvements in the construction of steam and vacuum gauges." *Letters Patent sealed.*
MAYOR. 18th July 1863.	**1807.** FREDERICK JOSEPH MAYOR, of Park Street, Grosvenor Square, in the County of Middlesex, Veterinary Surgeon, for an invention for—"Improvements in horse shoes." *Letters Patent sealed.*
SIMPSON. HUTTON. 20th July 1863.	**1808.** WILLIAM SIMPSON, of Northampton, in the County of Northamptonshire, Engineer, and JOHN HUTTON, of the same place, Accountant, for an invention for—"Improvements in the manufacture of hollow cutting tools." *Letters Patent sealed.*
CALVERT. 20th July 1863.	**1809.** FRANCIS ALTON CALVERT, of the City of Manchester, Engineer, for an invention for—"Improvements in machinery for opening, cleaning and preparing fibrous subtances." *Letters Patent sealed.*
BRASSEY. HARGREAVES. 20th July 1863.	**1810.** ROBERT BENJAMIN BRASSEY, of Ashton-under-Lyne, in the County of Lancaster, Manufacturer, and JAMES HARGREAVES, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for sizing and drying yarns and fabrics." *Letters Patent sealed.*
KNOWLES. 20th July 1863.	**1811.** THOMAS KNOWLES, of Hulme, in the County of Lancaster, Gentleman, for an invention for—"Improvements in machinery for opening, carding and cleaning cotton and other fibrous materials when in a manufactured or partly manufactured state." *Provisional protection only.*
BAILEY. BAILEY. 20th July 1863.	**1812.** JOHN BAILEY, and WILLIAM HENRY BAILEY, both of Albion Works, Salford, in the County of Lancaster, Turret Clock Makers, for an invention for—"Improvements in apparatus for the prevention of boiler explosions." *Letters Patent sealed.*

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SMITH. 20th July 1863.

1813. AUGUSTUS SMITH, of Stratford, in the County of Essex, Brush Manufacturer, for an invention for—"Improvements in machinery for dragging bristles, applicable also to drawing or sorting fibres and hair into different lengths."
Letters Patent sealed.

GEDGE. 20th July 1863.

1814. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements applicable to inland navigation."—*A communication to him from abroad by Charles Jacques Isaac Troll and François Jacques Mercier, of the Rue du Faubourg St. Martin, Paris, France.* *Provisional protection only.*

PELAZ. 20th July 1863.

1815. ANTOINE ALEXANDRE PELAZ, of Lyons, France, Gentleman, for an invention for—"Certain improvements in printing stuffs and other fibrous fabrics."
Letters Patent sealed.

AYCKBOURN. 20th July 1863.

1816. FREDERICK AYCKBOURN, of Moreton Street, in the County of Middlesex, Patent Bed Manufacturer, for an invention for—"Improvements in air and water beds, pillows, bolsters and cushions." *Letters Patent sealed.*

LYMAN. 20th July 1863.

1817. JOSIAH LYMAN, of Thavies' Inn, in the City of London, Civil Engineer, for an invention for—"Improvements in micrometer draughting scales."
Provisional protection only.

WEARE. 20th July 1863.

1818. ROBERT WEARE, of Northwood, Stoke-upon-Trent, in the County of Stafford, Merchant, for an invention for—"Improvements in water-closets, commodes, slop pails and other like apparatus or utensils." *Letters Patent sealed.*

GOOLD. 20th July 1863.

1819. JOSEPH GOOLD, of Corsham, in the County of Wilts, Tanner, for an invention for—"Improvements in the manufacture of ink."
Provisional protection only.

DANCHELL. 21st July 1863.

1820. FREDERICK LUDWIG HAHN DANCHELL, of Red Lion Square, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in apparatus for purifying water." *Letters Patent sealed.*

ROECKNER. 21st July 1863.

1821. CARL HEINRICH ROECKNER, of Richmond Terrace, Clapham Road, in the County of Surrey, for an invention for—"Improvements in machinery and process for reducing wood to a fibrous condition for the manufacture of paper stuff or pulp."
Letters Patent sealed.

CLARKE. 21st July 1863.

1822. WILLIAM CLARKE, of Forest Road, Nottingham, Lace Manufacturer, for an invention for—"Improvements in the manufacture of fabrics in twist lace machinery." *Provisional protection only.*

ABERDEIN. 21st July 1863.

1823. WILLIAM LYLE ABERDEIN, of Belfast, in the County of Antrim, in Ireland, Flax Mill Manager, for an invention for—"Improved machinery for breaking or softening and preparing flax, hemp, jute, tow and other fibrous substances."
Letters Patent sealed.

DUNCAN. 21st July 1863.

1824. CHARLES STEWART DUNCAN, of Inverness Road, Bayswater, in the County of Middlesex, for an invention for—"Improvements in the means of and apparatus for heating, melting, boiling, evaporating and other useful purposes."
Letters Patent sealed.

BAINBRIDGE. 21st July 1863.

1825. EDWARD THOMAS BAINBRIDGE, of St. Paul's Church Yard, in the City of London, for an invention for—"Improvements in ventilators."
Letters Patent sealed.

VANNER. 21st July 1863.

1826. JAMES ENGLEHURTT VANNER, of Coleman Street, in the City of London, for an invention for—"Improvements in the manufacture of umbrellas and parasols."
Letters Patent sealed.

HASELTINE. 21st July 1863.

1827. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved implement for harrowing and smoothing land."—*A communication to him from abroad by John Kelsey, of Yardbyrille, Pennsylvania, United States of America.* *Letters Patent sealed.*

BROOMAN. 21st July 1863.

1828. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in watches and other time-keepers."—*A communication to him from abroad by Adrien Philippe, of Geneva, Switzerland.* *Letters Patent sealed.*

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ALCAN. 21st July 1863.

1829. EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"Improvements in apparatus for condensing steam."—*A communication to him from abroad by Leon Gauchez, of Brussels, Belgium.* *Letters Patent sealed.*

NAYLOR. 21st July 1863.

1830. WILLIAM NAYLOR, of Queen's Road, Dalston, in the County of Middlesex, Engineer, for an invention for—"Improvements in safety valves and in apparatus connected therewith." *Letters Patent sealed.*

NEWTON. 21st July 1863.

1831. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of mats, floor cloths or coverings for floors, straps, bands, ropes and other analogous articles which are usually made of textile or fibrous materials."—*A communication to him from abroad by Placide Peltereau, of 45, Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

JACKSON. 22nd July 1863.

1832. PETER ROTHWELL JACKSON, of the Rolling Mills, Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for rolling hoops and tyres." *Letters Patent sealed.*

RONALD. 22nd July 1863.

1833. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in and apparatus for dressing or preparing for spinning hemp, flax, manilla-hemp and other like fibrous material." *Letters Patent sealed.*

SENIOR. 22nd July 1863.

1834. CHARLES SENIOR, of Dead Waters, near Huddersfield, in the County of York, Engineer, for an invention for—"Improvements in means or apparatus for closing, punching and rivetting hose-pipes of leather or other substances, applicable also for punching and rivetting mill-bands or driving straps and similar purposes." *Letters Patent sealed.*

WHITE. 22nd July 1863.

1835. JOSEPH WHITE, of Trinity Street, Trinity Square, in the County of Surrey, Manufacturer, for an invention for—"Improvements in pyramid and other cans or feeders for oil and other liquids." *Provisional protection only.*

BESLAY. 22nd July 1863.

1836. CHARLES BESLAY, of No. 11, Rue Menilmontant, in Paris, in the Empire of France, Gentleman, for an invention for—"Improvements in making all woven and thready fabrics waterproof, and in finishing or surfacing fabrics generally."—*A communication to him by Etienne Guillaume, of No. 138, Rue Menilmontant, Paris, aforesaid, Overseer.* *Letters Patent sealed.*

BERTRAM. 22nd July 1863.

1837. BENJAMIN BERAL BERTRAM, of Jewin Street, in the City of London, for an invention for—"An improved advertising medium." *Provisional protection* NOT *granted.*

PERRIN. 22nd July 1863.

1838. ISAAC PERRIN, of Birmingham, in the County of Warwick, Engineer, for an invention for—"An improved danger signal to be used on rifle, artillery and other practising grounds." *Provisional protection only.*

SIMMONS. 22nd July 1863.

1839. JOSEPH SIMMONS, of Rainham, Sittingbourne, in the County of Kent, Agricultural Implement Maker, for an invention for—"Improvements in ploughs." *Letters Patent sealed.*

COLE. 23rd July 1863.

1840. WILLIAM COLE, Carpenter and Builder, of 15, Wentworth Road, Bow Road, in the Parish of Mile End, and County of Middlesex, for an invention for—"Improvements in apparatus for securing the safety of persons in window cleaning or otherwise working outside of windows." *Letters Patent sealed.*

HOLDEN. 23rd July 1863.

1841. ANDREW TAYLOR HOLDEN, of the firm of Lawson and Holden, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in carriage and other springs." *Provisional protection only.*

FILLION. 23rd July 1863.

1842. LOUIS LAURENT JACQUES FILLION, of 10, Rue de la Fidélité, Paris, Glove Maker, for an invention for—"Improvements in apparatus for extinguishing chimney fires and in preventing explosions." *Letters Patent sealed.*

SOUL. 23rd July 1863.

1843. MATTHEW AUGUSTUS SOUL, of No. 3, Leadenhall Street, in the City of London, Patent Agent, for an invention for—"Improvements in expelling solid and liquid refuse matter from steam and sailing ships, below the water-line, applicable also for discharging cannon below water from ships and forts, and in part for charging gas retorts and iron furnaces and for other similar useful purposes."—*A communication to him from abroad by John Palmer, of Ferrol, in Spain, Engineer.* *Letters Patent sealed.*

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DAVIES. 23rd July 1863.

1844. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improvement in revolving fire-arms." *A communication to him from abroad by Christian Sharps, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

GARFORTH. GARFORTH. 23rd July 1863.

1845. WILLIAM GARFORTH, and JAMES GARFORTH, of Dukinfield, in the County of Chester, Engineers, for an invention for—"Certain improvements in preparing, beetling or finishing textile fabrics, such as cotton, wool, linen or other fibrous materials." *Letters Patent sealed.*

MEISEL. 23rd July 1863.

1846. MORITZ MEISEL, of 14, Park Walk West, Brompton, in the County of Middlesex, Engineer, for an invention for—"An improved apparatus for regulating the speed of trains on railways, and in assisting the locomotive engine and train in ascending and descending inclined planes."—*A communication to him from abroad by Carl Schouberszky, a person resident at St. Petersburg, in the Empire of Russia.* *Complete specification; Letters Patent sealed.*

HORTON. 23rd July 1863.

1847. WILLAM HORTON, of Glasgow, in the County of Lanark, North Britain, Gun Maker, for an invention for—"Improvements in fire-arms." *Provisional protection only.*

CLARK. 23rd July 1863.

1848. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in saddles."—*A communication to him from abroad by Jean Etienne Pohl, of 29, Boulevart St. Martin, Paris, Bookkeeper.* *Provisional protection only.*

PERKINS. 23rd July 1863.

1849. THOMAS PERKINS, of Exchange Buildings, Hitchen, Hertfordshire, Ironmonger, for an invention for—"Improvements in horse rakes and hand rakes." *Provisional protection only.*

KIRKLAND. 24th July 1863.

1850. JOHN KIRKLAND, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for working hydraulic presses." *Provisional protection only.*

BARNES. 24th July 1863.

1851. WILLIAM LAWSON BARNES, M.A., Clerk, Rector of Knapton, in the County of Norfolk, at present residing at Chippenham, in the County of Cambridge, for an invention for—"An improved method of breaking the speed of and stopping railway trains or other locomotive wheeled carriage or carriages, at the same time signalling to the driver, or for using the signal and break separately." *Provisional protection only.*

ENGLISH. 24th July 1863.

1852. ABRAHAM ENGLISH, of Hatfield, in the County of Herts, Inspector of Police, for an invention for—"Improvements in apparatus for securing and protecting horses and other cattle during their transit by rail and other ways, and on board ship." *Letters Patent sealed.*

STURGEON. 24th July 1863.

1853. THOMAS STURGEON, of Belle Sauvage Yard, in the City of London, for an invention for—"Improvements in chains." *Provisional protection only.*

BIRNBAUM. 24th July 1863.

1854. BERNARD BIRNBAUM, of 21, New Broad Street, and 14, Blomfield Street, both in the City of London, for an invention for—"Improvements in gaiters and leggings." *Letters Patent sealed.*

BULL. MORGAN. 25th July 1863.

1855. THOMAS CHARLES BULL, and THOMAS MORGAN, both of Weobley, in the County of Hereford, for an invention for—"An apparatus for collecting fruit from trees without injury." *Provisional protection only.*

JAMES. JAMES. JAMES. 25th July 1863.

1856. GEORGE HENRY JAMES, JAMES MARSHALL JAMES, and JOSIAH JAMES, all of No. 10, Dyer's Buildings, Holborn, in the City of London, for an invention for—"Improvements in the manufacture of covers for purses, wallets, and pocket books." *Provisional protection only.*

GAY. 25th July 1863.

1857. PAULIN ETIENNE GAY, of No. 5, Rue de Grenelle St. Honoré, in the City of Paris, in the Empire of France, Contractor of Public Works, for an invention for—"Improvements in boring apparatuses." *Letters Patent sealed.*

BOYD. 25th July 1863.

1858. JOHN BOYD, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improved mechanism for forming imitation selvages or longitudinal cords in weaving." *Letters Patent sealed*

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TOLHAUSEN. 25th July 1863.

1859. FREDERICK TOLHAUSEN, of 17, Faubourg Montmartre, Paris, Patent Agent, for an invention for—"Improvements in the manufacture of gun barrels." —*A communication from Maurice Mondon, a person resident at St. Etienne, Loire, France.* *Letters Patent sealed.*

CROCKFORD. 25th July 1863.

1860. CHARLES CROCKFORD, of Glenfield Spelter Works, Holywell, Flintshire, Smelter, for an invention for—"Improvements in the treatment and utilization of certain of the waste products from the manufacture of alkali and bleaching powder, and also from certain smelting operations." *Provisional protection only.*

WELCH. 27th July 1863.

1861. JOHN WELLINGTON WELCH, of the City of Manchester, Agent, for an invention for—"Improvements in sizing and finishing fabrics, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

TRANTER. 27th July 1863.

1862. WILLIAM TRANTER, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in breech loading and other revolving fire-arms." *Letters Patent sealed.*

FORD. FORD. 27th July 1863.

1863. FREDERICK FORD, and LEWIS FORD, both of the City of Gloucester, Manufacturers in Slate and Marble, for an invention for—"Improvements in the manufacture of various articles with surfaces in imitation of different kinds of marbles or similar ornamental materials." *Letters Patent sealed.*

THORNE. 27th July 1863.

1864. THOMAS THORNE, of Southsea, in the County of Hants, Carpenter, for an invention for—"Improved apparatus for disengaging ships' boats." *Letters Patent sealed.*

HASELTINE. 27th July 1863.

1865. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in coal oil lamps."—*A communication to him from abroad by the inventor, Michael Boyd Dyott, of Philadelphia, Pennsylvania, United States.* *Letters Patent sealed.*

BROOMAN. 27th July 1863.

1866. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in sleepers or supports for the rails of railways."—*A communication to him from abroad by Charles Marie Pouillet, of Paris, France.* *Provisional protection only.*

PAIN. 27th July 1863.

1867. JOSEPH PAIN, of the firm of Kipling and Pain, of Fort Street, Spitalfields, in the County of Middlesex, Umbrella Manufacturers, for an invention for—"Improvements in the manufacture of umbrellas and parasols." *Provisional protection only.*

WHITTAKER. 27th July 1863.

1868. JAMES WHITTAKER, of Moons Mill, within Walton-le-dale, in the County of Lancaster, Millwright, for an invention for—"Improvements in engines for obtaining motive-power by steam, air or any other vapour." *Letters Patent sealed.*

DAWSON. 28th July 1863.

1869. ROGER DAWSON, of No. 16, Craven Street, Strand, in the County of Middlesex, Gentleman, for an invention for—"An improved method of annihilating or extinguishing fires." *Provisional protection only.*

COCKERELL. 28th July 1863.

1870. MAURICE COCKERELL, of 3, Munden Terrace, Hammersmith, Middlesex, for an invention for—"The improvement of mortice and other door locks and latches." *Provisional protection only.*

HECTOR. 28th July 1863.

1871. ALEXANDER HECTOR, of Montrose, in the County of Forfar, Gentleman, for an invention for—"Improvements in means or apparatus for facilitating the catching of fish." *Letters Patent sealed*

DE ROSTAING. 28th July 1863.

1872. ALPHONSE ANTHELME ANTOINE BARON DE ROSTAING, of 29, Boulevard St. Martin, Paris, for an invention for—"An improved method of manufacturing iron and steel with cast iron taken in a sub-divided state." *Letters Patent sealed.*

TAYLOR. 28th July 1863.

1873. DOUGLAS TAYLOR, of Bonchester Bridge, in the County of Roxburgh, North Britain, Joiner, for an invention for—"Improvements in ventilating hay, corn and other ricks, and in apparatus connected therewith." *Provisional protection only.*

JEWELL. 28th July 1863.

1874. JOHN JEWELL, of Devoran, near Truro, in the County of Cornwall, for an invention for—"Improvements in setting boilers." *Letters Patent sealed.*

SMITH. 28th July 1863.

1875. WILLIAM THOMAS SMITH, of Dalston, in the County of Middlesex, Engineer, for an invention for—"An improved method of securing or tightening the cords of blind and other rollers." *Provisional protection only.*

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SAINTY. 29th July 1863.	**1876.** JOHN SAINTY, of Burnham Market, in the County of Norfolk, Agricultural Engineer, for an invention for—"Improvements in the construction of feeding troughs for sheep and other cattle." *Provisional protection only.*
GIRARDIN. 29th July 1863.	**1877.** PAUL HYACINTHE GIRARDIN, of Paris, in the Empire of France, for an invention for—"Improvements in lamps." *Letters Patent sealed.*
THOMPSON. 29th July 1863.	**1878.** NATHAN THOMPSON, of Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in apparatus for stopping the bung holes of casks and similar vessels, also in tools or implements for fixing and removing such stopping apparatus." *Letters Patent sealed.*
RICKARBY. BARRETT. 29th July 1863.	**1879.** GEORGE RICKARBY, of No. 1, St. Giles's Road, and THOMAS ALBERT BARRETT, of No. 73, Observatory Street, both in the City of Oxford, for an invention for—"Improvements in window frames and sashes." *Provisional protection only.*
BONNEVILLE. 29th July 1863.	**1880.** HENRI ADRIEN BONNEVILLE, Patent Agent of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"An improved self-acting 'flushing' apparatus."—*A communication from Louis Melotte, Architect, a person residing at Liege, in the Kingdom of Belgium.* *Letters Patent sealed.*
NEWTON. 29th July 1863.	**1881.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in cartridges."—*A communication to him from abroad by Silas Crispin, of the City and State of New York, United States of America.* *Letters Patent sealed.*
STURGE. 29th July 1863.	**1882.** EDWIN STURGE, of Walworth, in the County of Surrey, Engineer, for an invention for—"Improvements in coating or protecting metallic surfaces." *Letters Patent sealed.*
INSKEEP. 30th July 1863.	**1883.** GEORGE INSKEEP, of Madeley, in the County of Stafford, Engineer, for an invention for—"An improved mill for grinding bones, grain, logwood and such like substances." *Letters Patent sealed.*
BRANFORD. 30th July 1863.	**1884.** JOHN WILLIAM BRANFORD, Merchant, of March, in the County of Cambridge, for an invention for—"An improved agricultural implement for hoeing and cleaning the land, and for cutting or setting out the plant of root crops at certain distances from each other." *Letters Patent sealed and specification filed by order.*
BOEDDINGHAUS. 30th July 1863.	**1885.** JULIUS BOEDDINGHAUS, of Elberfeld, in the Kingdom of Prussia, for an invention for—"Improvements in means or apparatus for the production of printed or particolored yarns." *Provisional protection only.*
STEPHENS. HOARE. 30th July 1863.	**1886.** JOSEPH THOMPSON STEPHENS, of Bridport, in the County of Dorset, Gentleman, and CHARLES HOARE, Manager to William Hounsell and Company, of Bridport, aforesaid, Manufacturers, for an invention for—"Improvements in machinery for the manufacture of yarns, threads, laid twine and other cordage." *Letters Patent sealed.*
HOWELL. 30th July 1863.	**1887.** JOSEPH BENNETT HOWELL, of Sheffield, in the County of Yorkshire, Steel Manufacturer, for an invention for—"Improvements in ordnance, fire-arms, and projectiles." *Provisional protection only.*
FIRTH. FIRTH. 30th July 1863.	**1888.** WILLIAM FIRTH, of Burley, near Leeds, in the County of York, Merchant, and SAMUEL FIRTH, of the same place, Gentleman, for an invention for—"Improvements in machinery and apparatus for working coal and other mines, and in apparatus for loading waggons or other vehicles." *Letters Patent sealed.*
SMITH. 30th July 1863.	**1889.** GEORGE SMITH, the younger, of 230, King's Road, Chelsea, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in buffing and traction apparatus of railway carriages and waggons." *Letters Patent sealed.*
HOE. COLE. 30th July 1863.	**1890.** RICHARD HOE, of Leadenhall Street, in the City of London, and HENRY JAMES COLE, of New Street, Kennington Road, in the County of Surrey, Packing Case Makers, for an invention for—"Improvements in fastenings for packing cases." *Letters Patent sealed.*

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APPS. 30th July 1863.

1891. THOMAS APPS, of Lower Norwood, in the County of Surrey, Gentleman, for an invention for—"Improvements in four wheeled vehicles." *Letters Patent sealed.*

GRAHAM. GRAHAM. 31st July 1863.

1892. WILLIAM GRAHAM, and JOHN GRAHAM, of the firm of Messieurs Graham and Sons, of Burnley, in the County of Lancaster, Machine Makers, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

SIGL. 31st July 1863.

1893. GEORGE SIGL, of Vienna, in the Empire of Austria, Engineer, and Principal of the firm of G. Sigl and Co., Vienna and Berlin, for an invention for—"Improvements in the construction of force pumps." *Letters Patent sealed.*

HADDAN. 31st July 1863.

1894. JOHN COOPE HADDAN, of Bessborough Gardens, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in fire-arms and in artillery and projectiles for the same." *Provisional protection only.*

CULVERWELL. 31st July 1863.

1895. JOSEPH POPE CULVERWELL, of the City of Dublin, Gentleman, for an invention for—"Improvements in railway lamps." *Letters Patent sealed.*

ANDREUX. 31st July 1863.

1896. JEAN BAPTISTE ANDREUX, of No. 12, Rue Notre-Dame de Nazareth, Paris, in the Empire of France, Toy Maker, for an invention for—"Improvements in the application of steam to toy boats or other similar toys where steam can be employed as a motive-power." *Provisional protection only.*

JOHNSON. 31st July 1863.

1897. BENJAMIN JOHNSON, of Church Street, Camberwell Green, in the County of Surrey, Piano-forte Manufacturer, for an invention for—"Improvements in piano-fortes." *Provisional protection only.*

DICKSON. 31st July 1863.

1898. JOHN FARMERLEY DICKSON, of Bouverie Street, Fleet Street, in the City of London, for an invention for—"Improvements in the manufacture of boots and shoes." *Provisional protection only.*

ARROTT. 31st July 1863.

1899. ALEXANDER ROBERTSON ARROTT, of Saint Helen's, in the County of Lancaster, Chemist, for an invention for—"Improvements in bleaching certain vegetable fibres used for textile or other purposes, whether in the raw state or manufactured." *Letters Patent sealed.*

STEWART. 31st July 1863.

1900. ROBERT STEWART, of Elmira, in the State of New York, in the United States of America, for an invention for—"Improvements in operating the cut off valves of steam-engings." *Complete specification; Letters Patent sealed.*

COTTON. 1st August 1863.

1901. WILLIAM COTTON, of Loughborough, in the County of Leicester, Manufacturer, for an invention for—"Improvements in the manufacture of looped fabrics and in machinery or apparatus employed therein." *Letters Patent sealed.*

BROOMAN. 1st August 1863.

1902. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in dyeing mixed animal and vegetable fibres whether in a raw or manufactured state."—*A communication to him from abroad by Theophile Grison, of Deville Les Rouen, France.* *Letters Patent sealed.*

BROOMAN. 1st August 1863.

1903. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved warming pan."—*A communication to him from abroad by Joseph Gineston, of Entraygues, France.* *Provisional protection only.*

TAYLOR. 1st August 1863.

1904. GEORGE TAYLOR, of Leeds, in the County of York, Iron Manufacturer, for an invention for—"Improvements in shaping boiler and other plates and in apparatus employed therein." *Letters Patent sealed.*

HOEFLER. 1st August 1863.

1905. JOHN HOEFLER, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Certain improvements in the method of preparing and treating 'codilla fibre' and 'tow,' to render them available as a substitute for cotton or to be mixed therewith." *Provisional protection only.*

KIRK. 1st August 1863.

1906. JOSIAH KIRK, of Burnley, in the County of Lancaster, Overlooker of Power Looms, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

BRADSHAW. 1st August 1863.

1907. THOMAS BRADSHAW, of Bolton, in the County of Lancaster, Broker, for an invention for—"Certain improvements in machinery or apparatus for giving motion to 'dobby horses,' 'flying and swinging boats,' or similar apparatus used for public amusement." *Provisional protection only.*

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BIBBY. 1st August 1863.	**1908.** RICHARD EDWIN BIBBY, of Manchester, in the County of Lancaster, Dry-salter, for an invention for—"An improved fire-proof cement which may be employed for covering walls, ceilings and floors, and is also applicable in the manufacture of fire bricks, crucibles, retorts, melting pots, and for other purposes where fire resisting properties are required." *Letters Patent sealed.*
SUTTON. 1st August 1863.	**1909.** EDMUND SUTTON, of Palace Road, Wells Street, South Hackney, in the County of Middlesex, Silversmith, for an invention for—"Improvements in fastenings for cigar cases, portemonnaies, bags and other like articles." *Letters Patent sealed.*
FELLOWES. HEMFREY. 1st August 1863.	**1910.** THOMAS FELLOWES, and HENRY HEMFREY, both of Spalding, in the County of Lincoln, for an invention for—"Improvements in apparatus for elevating straw and other agricultural produce." *Letters Patent sealed.*
VANNER. 1st August 1863.	**1911.** JAMES ENGLEBURTT VANNER, of Coleman Street, in the City of London, for an invention for—"Improvements in the manufacture of umbrellas and parasols." *Letters Patent sealed.*
COWPER. 3rd August 1863.	**1912.** EDWARD ALFRED COWPER, of No. 35A, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in self-acting mules for spinning." *Provisional protection only.*
FIELD. 3rd August 1863.	**1913.** JOHN WILLIAM PARKER FIELD, of 233, High Holborn, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in the manufacture of sheaths or cases for staves or other similar weapons." *Letters Patent sealed.*
GERLAND. 3rd August 1863.	**1914.** BALTHAZAR WILHELM GERLAND, of Macclesfield, in the County of Chester, Analytical Chemist, for an invention for—"Improvements in the manufacture of size, glue, and phosphates." *Letters Patent sealed.*
IMBERT. BONNET. PFISTER. 3rd August 1863.	**1915.** JOSEPH IMBERT, PROSPER BONNET, and JEAN PFISTER, all of No. 7, Rue Thévenot, Paris, in the Empire of France, Lamp Manufacturers, for an invention for—"Improvements in lamps." *Letters Patent sealed.*
WOODS. 3rd August 1863.	**1916.** HAMILTON WOODS, of Burton-upon-Trent, in the County of Stafford, Engineer, for an invention for—"Improvements in the apparatus used for regulating the temperatures during the process of fermentation in the 'union cask,' 'tunning cask,' or 'cleansing cask.'" *Letters Patent sealed.*
MUNRO or GRAHAM. 3rd August 1863.	**1917.** JOHN MUNRO, generally known as JOHN MUNRO GRAHAM, of No. 13, Melton Street, Euston Square, in the County of Middlesex, for an invention for—"Improvements in apparatus for producing optical illusions." *Provisional protection only.*
GOUTY. 4th August 1863.	**1918.** CHARLES GOUTY, of La Tour, near Bédarieux, Department of the Hérault, in the Empire of France, Fuller, for an invention for—"Improvements in fulling, thickening, felting and cleansing cloths, and in apparatus connected therewith." *Provisional protection only.*
ABRAHAMS. 4th August 1863.	**1919.** JOSEPH ABRAHAMS, of 9, Great Prescott Street, Goodman's Fields, E., Watch Manufacturer, for an invention for—"Improvements in brakes for railway and other carriages." *Letters Patent sealed.*
BAYLIS. 4th August 1863.	**1920.** THOMAS HUTCHINSON BAYLIS, of 55, Mornington Road, Regent's Park, in the County of Middlesex, Gentleman, for an invention for—"Improvements in hawse pipes, mooring pipes, and deck chain pipes." *Provisional protection only.*
STEVENS. 4th August 1863.	**1921.** GEORGE STEVENS, of Malvern Cottages, Portland Place North, Clapham Road, in the County of Surrey, for an invention for—"Improvements in means or apparatus for effecting a regular supply of air or aëriform fluids for various purposes." *Letters Patent sealed.*
BURY. PRICE. 4th August 1863.	**1922.** SAMUEL BURY, of Manchester, in the County of Lancaster, Calenderer and Finisher, and JOHN PRICE, of the same place, Engineer, for an invention for—"Certain improvements in valves for steam-engines." *Letters Patent sealed.*
WALSH. 4th August 1863.	**1923.** JOHN HENRY WALSH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in breech loading fire-arms, and in the means of extracting cartridge cases therefrom." *Letters Patent sealed.*

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COTELLE. 4th August 1863.

1924. EUGÈNE ALPHONSE COTELLE, of 29, Boulevard St. Martin, Paris, Empire of France, Distiller, for an invention for—"A new method of manufacturing gas alcohol by means of diluted acids acting indefinitely without reconcentration." *Letters Patent sealed.*

NEWTON. 4th August 1863.

1925. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery or apparatus for moulding and casting hollow projectiles."—*A communication to him from abroad by Jean Simon Voruz, senior, of 45, Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

PACE. 4th August 1863.

1926. EDMUND PACE, of the firm of Tylor and Pace, of Queen Street, in the City of London, Manufacturers, for an invention for—"Improvements in machinery for cutting splints for matches and for collecting the same." *Provisional protection only.*

PICKERSGILL. 4th August 1863.

1927. THOMAS PICKERSGILL, of Huddersfield, in the County of York, Manufacturer of Mill Strapping for Machinery, for an invention for—"Improvements in machinery or apparatus for feeding wool, cotton and other fibrous materials into machines for preparing the same for spinning." *Provisional protection only.*

COWPER. 5th August 1863.

1928. EDWARD ALFRED COWPER, of No. 35A, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in furnaces for heating air, steam and other elastic fluids." *Letters Patent sealed.*

CLARK. 5th August 1863.

1929. GEORGE CLARK, of No. 30, Craven Street, Strand, Westminster, in the County of Middlesex, for an invention for—"Improvements in the construction and protection of ships, vessels, and floating batteries, and in the preparation and arrangement of materials for those purposes, some of such improvements being applicable to the construction and protection of land fortifications." *Letters Patent sealed.*

WILKINS. 5th August 1863.

1930. GEORGE WILKINS, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"A new and improved means of railway signalling." *Provisional protection only.*

STORER. HANCOCK. 5th August 1863.

1931. WILLIAM STORER, and JOHN HANCOCK, both of the Town and County of the Town of Nottingham, Machinists, for an invention for—"Improvements in electro-motive engines." *Provisional protection only.*

GARTON. HILL. 5th August 1863.

1932. CHARLES GARTON, of the City and County of Bristol, Brewer and THOMAS HILL, of the Town and County of the Town of Southampton, Sugar Refiner, for an invention for—"Improvements in evaporating and cooling." *Provisional protection only.*

HODSON. 5th August 1863.

1933. WILLIAM HODSON, of Hull, in the County of York, for an invention for—"Improvements in machinery used for propelling carriages and vessels." *Letters Patent sealed.*

NEWTON. 5th August 1863.

1934. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of and apparatus for producing stereotype plates."—*A communication to him from abroad by Stephen Davis Tucker, of New York City, United States of America.* *Letters Patent sealed.*

GOWLAND. 6th August 1863.

1935. GEORGE GOWLAND, of Liverpool, in the County of Lancaster, Chronometer Maker, for an invention for—"Improvements in mariners' compasses." *Provisional protection only.*

LOWE. 6th August 1863.

1936. CHARLES LOWE, of Bradford Street South, Bradford, near Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in dyeing and printing." *Provisional protection only.*

DOWSON. 6th August 1863.

1937. JOSEPH EMERSON DOWSON, of 4, Victoria Street, Westminster, for an invention for—"A new application of rolled metal plates to the formation of railways, bridges, tramways and other structures." *Letters Patent sealed.*

PINÈDE. 6th August 1863.

1938. JOSEPH GUSTAVE PINÈDE, of Liancourt, in the Department of the "Oise," in the Empire of France, Mechanician, for an invention for—"Improvements in apparatus for regulating the speed of steam and hydraulic engines." *Letters Patent sealed.*

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HODGSON. WOODIFIELD. 6th August 1863.

1939. WILLIAM PRODER HODGSON, of Hylton, near Sunderland, and JOHN VAUX WOODIFIELD, of the firm of Woodifield and Hills, of Hope Street Foundry, Sunderland, both in the County of Durham, for an invention for—"Improvements in machinery for the manufacture of rivets." *Letters Patent sealed.*

TENWICK. 6th August 1863.

1940. JOHN TENWICK, of Albion Iron Foundry, Clarendon Street, Landport, Portsmouth, in the County of Hants, Iron Moulder, for an invention for—"Improvements in self-acting valves and traps for sewers." *Letters Patent sealed.*

YOUNG. 6th August 1863.

1941. JAMES YOUNG, of Bucklersbury, in the City of London, Gentleman, for an invention for—"Improvements in the preservation of animal matter." *Letters Patent sealed.*

CLARK. 6th August 1863.

1942. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in ovens."—*A communication to him from abroad by Jacques Blondel, of 29, Boulevart St. Martin, Paris, Proprietor.* *Letters Patent sealed.*

CLARK. 6th August 1863.

1943. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in taps or stop cock apparatus."—*A communication to him from abroad by François Jean Cantagrel, of 29, Boulevart St. Martin, Paris, Civil Engineer.* *Provisional protection only.*

CHARAGEAT. 6th August 1863.

1944. GABRIEL EMILE CHARAGEAT, of 2, Rue Sainte Appoline, Paris (in the Empire of France), for an invention for—"Improvements in the construction of frames for umbrellas and parasols." *Letters Patent sealed.*

QUELLE. 6th August 1863.

1945. EUGÈNE EHRENFRIED QUELLE, of Bermondsey, in the County of Surrey, Skin Dyer, for an invention for—"Improvements in inkstands." *Letters Patent sealed.*

KIRKHAM. 6th August 1863.

1946. JOHN KIRKHAM, of Euston Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for generating heat for smelting and other purposes." *Letters Patent sealed.*

SIMMELKIAR. SPICER. 6th August 1863.

1947. THOMAS SIMMELKIAR, of Black Rock, in the County of Cork, Ireland, and JOHN IBBETSON SPICER, of Park Road, Old Ford, in the County of Middlesex, for an invention for—"An improved composition for coating or painting the bottoms of ships or vessels to prevent them from fouling." *Letters Patent sealed.*

LIDDLE. 7th August 1863.

1948. CATHERINE OR KATTY LIDDLE, of 7, Comely Bank, near Edinburgh, N.B., Cook and Housekeeper, for an invention for—"An improved method of cooking an egg and an improved pan or apparatus for the same." *Provisional protection* NOT *granted.*

JONES. 7th August 1863.

1949. WILLIAM JONES (of the firm of William Jones and Sons), of Warrington, in the County of Lancaster, Engineers, for an invention for—"Certain improvements in steam-boilers." *Letters Patent sealed.*

MULHOLLAND. 7th August 1863.

1950. FREDERICK GEORGE MULHOLLAND, of No. 36, Essex Street, Strand, in the County of Middlesex, Engineer, for an invention for—"Improvements in pipe castings for gas, water, sanitary and other general purposes, and the introduction of an elastic chemical compound to form expansive joints thereto, for prevention of leakage." *Provisional protection only.*

NEWTON. 7th August 1863.

1951. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the manufacture of shuttles."—*A communication to him from abroad by Paul Morin, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

SLATER. 7th August 1863.

1952. JOHN WILLIAM SLATER, of Huddersfield, in the County of York, Manufacturer of Mordants and Colours, for an invention for—"Improvements in the production of yellow and orange coloring matters." *Letters Patent sealed.*

JOHNSON. 7th August 1863.

1953. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for preventing sea sickness."—*A communication to him from abroad by Henry Giffard, of Paris, in the Empire of France.* *Letters Patent sealed.*

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BROOMAN. 7th August 1863.

1954. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in coke ovens."—*A communication to him from abroad by Charles Claude Philibert Nicolas Pernolet, of Paris, France.* *Letters Patent sealed.*

WATSON. 7th August 1863.

1955. EDWARD WATSON, of King Street, in the City of London, Engineer, for an invention for—"An improved apparatus whereby screw propellers may be made to steer as well as propel, applicable also as an improved ball and socket joint." *Provisional protection only.*

PLATT. 7th August 1863.

1956. JAMES PLATT, of No. 10, Charlotte Street, Bloomsbury, in the County of Middlesex, for an invention for—"Improvements in apparatus for supplying steam-boilers with water." *Provisional protection only.*

GUILLOD. 7th August 1863.

1957. THOMAS WALKER GUILLOD, of No. 15, Park Place Terrace, in the Parish of Paddington, for an invention for—"Improvements in the manufacture of chess boards and chess men." *Letters Patent sealed.*

MOREWOOD. 7th August 1863.

1958. EDMUND MOREWOOD, of Stratford, in the County of Essex, for an invention for—"Improvements in coating metals." *Letters Patent sealed.*

THOMPSON. FITTON. FITTON. 7th August 1863.

1959. JOHN THOMPSON, of Ardwick, in the County of Lancaster, Machinist, EDWARD GERRARD FITTON, of the same place, Machinist, and FREDERICK ALEXANDER FITTON, of the same place, Foreman, for an invention for—"Improvements in engines for carding cotton and other fibrous materials." *Letters Patent sealed.*

JARVIE. MILLER. 8th August 1863.

1960. NEDRICK JARVIE, and WILLIAM MILLER, of Glasgow, in the County of Lanark, North Britain, Rope Makers, for an invention for—"Improvements in the manufacture of oakum and in apparatus therefor." *Letters Patent sealed.*

ROBINS. 8th August 1863.

1961. WILLIAM BURNET ROBINS, of Harborne, in the County of Stafford, Actuary, for an invention for—"A new or improved instrument or apparatus for extinguishing fires." *Provisional protection only.*

THORNTON. THORNTON. THORNTON. THORNTON. 8th August 1863.

1962. JOHN THORNTON, JAMES THORNTON, ALBERT THORNTON, and WILLIAM THORNTON, all of Nottingham, Manufacturers, for an invention for—"Improvements in apparatus used for producing looped fabrics." *Letters Patent sealed.*

PRICE. 8th August 1863.

1963. ASTLEY PASTON PRICE, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the application of india-rubber and gutta-percha to the manufacture of brushes and mats."—*A communication to him from abroad by Anthony Pollak, of the City of Washington, in the United States of America.* *Provisional protection only.*

BROWN. 8th August 1863.

1964. HENRY ROWLAND BROWN, of Cranbourne Street, in the County of Middlesex, for an invention for—"New or improved apparatus for the regulated delivery of cards, tickets, labels, bills and sheets or pieces of cardboard, paper, metal or other material, for advertising or other purposes." *Letters Patent sealed.*

SMITH. 8th August 1863.

1965. MICHAEL SMITH, of 71, Fleet Street, in the City of London, Preserver, for an invention for—"Improvements in obtaining farinaceous material from potatoes." *Provisional protection only.*

ARMSTRONG. 8th August 1863.

1966. JOHN WARD ARMSTRONG, of Carmarthen, in the County of Carmarthen, Engineer, for an invention for—"Improvements in fastening and in securing in position the rails of railways, the said fastening being applicable for other uses." *Letters Patent sealed.*

FULLARTON. 10th August 1863.

1967. JOHN ALEXANDER FULLARTON, of the City of Manchester, in the County of Lancaster, Iron Merchant, for an invention for—"Improvements in the method of fastening hoops for packing bales, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

DEL RIO. 10th August 1863.

1968. PATRICIO MARCOS DEL RIO, of Jermyn Street, Saint James, Gentleman, for an invention for—"A new machine for obtaining motive-power." *Provisional protection only.*

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HEYNE. 10th August 1863.

1969. BERNARD HEYNE, the younger, of Liscard, in the County of Chester, Artist, for an invention for—"Improved apparatus to facilitate sketching and drawing landscapes, buildings, machinery and other objects, in correct perspective." *Provisional protection only.*

DICKSON. 10th August 1863.

1970. RICHARD DICKSON, Engineer, in the employ of Messrs. Waterlow and Sons, of London Wall, in the City of London, for an invention for—"Improvements in lithographic printing presses." *Letters Patent sealed.*

CUNNACK. 10th August 1863.

1971. RICHARD JOHN CUNNACK, of Helston, in the County of Cornwall, for an invention for—"Improvements in the manufacture of cartridges for blasting and projectile purposes." *Provisional protection only.*

NEWTON. 10th August 1863.

1972. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved manufacture of blue and of violet colouring matter."—*A communication to him from abroad by Meister Lacius and Company, of Hoechst-am-Main, in the Duchy of Nassau, Germany.* *Provisional protection only.*

ROBSON. 11th August 1863.

1973. JAMES ROBSON, junior, of South Shields, in the County of Durham, Ironmonger, for an invention for—"Improvements in money tills." *Provisional protection only.*

SIMON. 11th August 1863.

1974. EDWARD SIEGMUND SIMON, of 10, Bury Street, in the City of London, for an invention for—"An improved fastening for leggings." *Provisional protection only.*

MYERS. FORBES. 11th August 1863.

1975. EDWARD MYERS, of 2, Millbank Row, County of Middlesex, Civil Engineer, and HUGH FORBES, of 6, Aberdeen Place, Maida Hill, County of Middlesex, for an invention for—"An improved rotary pump." *Letters Patent sealed.*

KNOWLES. HALLIWELL. 11th August 1863.

1976. WILLIAM KNOWLES, of Bolton, in the County of Lancaster, Cotton Spinner, and ROBERT HALLIWELL, of the same place, Foreman, for an invention for—"Certain improvements in machinery for preparing, spinning and doubling cotton and other fibrous substances." *Letters Patent sealed.*

BARKER. 11th August 1863.

1977. DAVID WRIGHT BARKER, of Anderlecht, near Brussels, in Belgium, Manufacturer of Stuff Goods, for an invention for—"Improvements in means or apparatus for actuating rotary shuttle boxes." *Letters Patent sealed.*

KING. 11th August 1863.

1978. JOHN THOMSON KING, of Liverpool, in the County of Lancaster, Consulting Engineer, for an invention for—"Improvements in apparatus for containing and distributing gas for lighting railway carriages, steam boats and other moveable vehicles and vessels, railway stations and other places, parts of such apparatus being suitable for governing the supply of gas and air for various purposes." *Letters Patent sealed.*

HAIGH. 11th August 1863.

1979. WILLIAM BLACKETT HAIGH, of Oldham, in the County of Lancaster, Engineer, for an invention for—"An improved equilibrium saw frame." *Letters Patent sealed.*

NEWTON. 11th August 1863.

1980. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved process for hardening cast iron."—*A communication to him from abroad by Thomas Allin, of New York, in the United States of America.* *Letters Patent sealed.*

WILLANS. 11th August 1863.

1981. JACOB GEOGHEGAN WILLANS, of Westbourne Grove Terrace, in the County of Middlesex, for an invention for—"Improvements in the manufacture of iron." *Letters Patent sealed.*

CLARK. 11th August 1863.

1982. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in road sweeping machines."—*A communication to him from abroad by Jean Baptiste Tailfer, Mechanician, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed*

WHEELER. 11th August 1863.

1983. JAMES WHEELER, of 23, Poultry, in the City of London, Glove Manufacturer, for an invention for—"Improvements in the perfuming of gloves." *Letters Patent sealed.*

GRAY. 11th August 1863.

1984. WILLIAM GRAY, of Brownrigg, in the County of Haddington, North Britain, Farmer, for an invention for—"Improvements in certain parts of reaping-machines, and in the working or application of the same." *Letters Patent sealed.*

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LILLIE. 11th August 1863.

1985. SIR JOHN SCOTT LILLIE, Knight and Companion of the Most Honourable Military Order of the Bath, of 105, Pall Mall, in the County of Middlesex, for an invention for—"An improved revolving battery." *Letters Patent sealed.*

GRAHAM. 12th August 1863.

1986. GEORGE GRAHAM, Manager of the Dalquhurn Turkey Red Dye Works, in the County of Dumbarton, North Britain, for an invention for—"Improvements relating to baths or boilers used in dyeing." *Letters Patent sealed.*

MUSHET. 12th August 1863.

1987. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in the manufacture of cast steel." *Letters Patent sealed.*

CORNFORTH. ANDREWS. 12th August 1863.

1988. JOHN CORNFORTH, of Birmingham, in the County of Warwick, Manufacturer, and ALFRED ANDREWS, of Birmingham, aforesaid, Shoe Maker, for an invention for—"Improvements in the nails commonly called screw rivets, which improvements are also applicable to other nails and spikes." *Letters Patent sealed.*

BODMER. 12th August 1863.

1989. LOUIS RUDOLPH BODMER, of 2, Thavies Inn, in the City of London, Patent Agent, for an invention for—"An improved mode and apparatus for dressing, finishing, and for imparting lustre to yarn and thread made of silk, cotton and other fibrous substances."—*A communication to him from abroad by Emanuel Burgy and Louis Guillemin, both of Bâle, in the Republic of Switzerland.* *Letters Patent sealed.*

CANHAM. 12th August 1863.

1990. RICHARD CANHAM, of Clerkenwell, in the County of Middlesex, Foundry Manager, for an invention for—"Improvements in machines for the preparation of moulds for casting." *Letters Patent sealed.*

TEMPLEMAN. 12th August 1863.

1991. JAMES TEMPLEMAN, of Glasgow, in the County of Lanark, North Britain, Artificial Fuel Manufacturer, for an invention for—"Improvements in the manufacture or production of artificial fuel." *Letters Patent sealed.*

NEWALL. 12th August 1863.

1992. ROBERT STIRLING NEWALL, of Gateshead, in the County of Durham, for an invention for—"An improved mode of and apparatus for drying chemical compounds and other substances." *Letters Patent sealed.*

WAPPENSTEIN. 12th August 1863.

1993. RUDOLPH WAPPENSTEIN, of Manchester, in the County of Lancaster, Engraver, for an invention for—"A new method of preventing the forgery of bankers' cheques and other documents, by the use of a stamp and a new apparatus, whereby the issue of stamped documents is controlled." *Letters Patent sealed.*

HUDSON. CATLOW. DODGEON. 12th August 1863.

1994. WILLIAM HUDSON, of Burnley, in the County of Lancaster, Gentleman, CHRISTOPHER CATLOW, of the same place, Overlooker, and JOHN DODGEON, of the same place, Commission Agent, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

NEWALL. 12th August 1863.

1995. ROBERT STIRLING NEWALL, of Gateshead, in the County of Durham, for an invention for—"Improvements in apparatus for serving ropes for ships' rigging and other purposes." *Letters Patent sealed.*

CLARK. 12th August 1863.

1996. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improved lamp for burning coal oil and other similar hydro-carbons, without the aid of a draught chimney."—*A communication to him from abroad by Woolsey George Stirling and Nathaniel Wheeler, both of Bridgeport, in the County of Fairfield, State of Connecticut, in the United States of America.* *Letters Patent sealed.*

ELLIS. 13th August 1863.

1997. JOHN ELLIS, of Liverpool, in the County of Lancaster, Millwright and Engineer, for an invention for—"Improvements in machinery for scouring, cleaning and polishing wheat, rice, malt, grain and other seeds." *Provisional protection only.*

DENNETT. 13th August 1863.

1998. CHARLES COLTON DENNETT, of Nottingham, in the County of Nottingham, Builder, for an invention for—"An improved method of fireproof construction for buildings by the use of arches formed of concrete." *Letters Patent sealed.*

WINCHCOMB. 13th August 1863.

1999. HENRY WINCHCOMB, of 3, China Walk, Lambeth, London, Labourer, for an invention for—"Improvements in street pillar letter boxes and bags for the reception of post letters." *Provisional protection only.*

EDMUNDS. 13th August 1863.

2000. JAMES EDMUNDS, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"An improvement or improvements in gun and pistol furniture." *Letters Patent sealed.*

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ASHWIN. 13th August 1863.

2001. THOMAS ASHWIN, of Birmingham, in the County of Warwick, Accountant Clerk, for an invention for—" A new or improved dress fastening, which said fastening may also be applied to the fastening of braces, belts and other bands, and to other like purposes." *Provisional protection only.*

TESSIER. 13th August 1863.

2002. CHARLES TESSIER, of 9, Lower John Street, London, in the County of Middlesex, for an invention for—" Safely closing doors, windows and other apertures." —*A communication to him from abroad by Leon Mariz and Jacques Fumet, both of Paris, in the Empire of France.* *Provisional protection* NOT *granted.*

HENDERSON. 13th August 1863.

2003. JOHN HENDERSON, of Bradford, in the County of York, Carpet Manufacturer, for an invention for—" Improvements for preparing yarns for printing." *Provisional protection only.*

MENNONS. 13th August 1863.

2004. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of Abingdon Chambers, in the City of Westminster, and 24, Rue de Dunkerque, Paris, in the Empire of France, for an invention for —" Improvements in the construction of numbering machines."—*A communication from Wilhelm Hof and Thomas Ward, persons resident at La Chapelle St. Denis (Dept. de la Seine), in France.* *Provisional protection only.*

DEANE. 13th August 1863.

2005. EDWARD DEANE, of Arthur Street East, London Bridge, in the City of London, Engineer, for an invention for—" Improvements in artillery and fire-arms, and in projectiles for the same." *Provisional protection* NOT *granted.*

BROWN. 13th August 1863.

2006. HARVEY BROWN, of the City of New York, in the United States of America, at present residing in King Street, Cheapside, in the City of London, Gentleman, for an invention for—" Improvements in burners for lamps for burning oils or fluids." *Letters Patent sealed.*

BRAE. 14th August 1863.

2007. ANDREW EDMUND BRAE, of Leeds, in the County of York, for an invention for—" Improved means of conducting electric currents through railway trains, and of actuating signals or alarums therein." *Provisional protection only.*

SCHIELE. 14th August 1863.

2008. CHRISTIAN SCHIELE, of Clarence Buildings, in the City of Manchester, in the County of Lancaster, Engineer, for an invention for—" Improvements in fans, pumps and machinery for propelling air, fluids or other substances by centrifugal force." *Letters Patent sealed.*

WILMOT. 14th August 1863.

2009. SAMUEL RUSSEL WILMOT, of Brooklyn, New York, United States, now of Exeter, Devonshire, Manufacturer, for an invention for—" Improvements in hand trucks."—*A communication to him from abroad by Alexander Douglas, of Bergen County, New Jersey, United States of America.* *Complete specification; Letters Patent sealed.*

GREENWOOD. 14th August 1863.

2010. ROBERT BENJAMIN GREENWOOD, of No. 416, Hackney Road, in the County of Middlesex, for an invention for —" Improved means of preventing accidents upon railways." *Letters Patent sealed.*

TAYLOR. 14th August 1863.

2011. EDWARD TAYLOR, of Salford, in the County of Lancaster, Machinist, for an invention for—" Certain improvements in machinery or apparatus for churning." *Provisional protection only.*

WILSON. 14th August 1863.

2012. EDWARD BROWN WILSON, of No. 5, Parliament Street, in the City of Westminster, Engineer, for an invention for—" Improvements in blast furnaces." *Letters Patent sealed.*

JONES. 14th August 1863.

2013. FREDERICK JOHN JONES, of Aldermanbury, in the City of London, Manufacturer, for an invention for—" Improvements in locks or fastenings." *Provisional protection only.*

LISHMAN. 14th August 1863.

2014. MATTHEW HODGSON LISHMAN, of Stockton-on-Tees, in the County of Durham, Accountant, for an invention for—" Improvements in machinery for punching and for marking plates in which holes are to be punched." *Letters Patent sealed.*

SIEGRIST. 14th August 1863.

2015. MICHEL SIEGRIST, of Ewell, in the County of Surrey, Gentleman, for an invention for—" Improvements in railway breaks actuated by the pressure of the atmosphere." *Provisional protection only.*

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RUSSELL. 14th August 1863. **2016.** NORMAN SCOTT RUSSELL, of Great George Street, Westminster, Civil Engineer, for an invention for—"Improvements in apparatus for working great guns." *Letters Patent sealed.*

WAIN. 14th August 1863. **2017.** JOHN WAIN, of the City of Manchester, in the County of Lancaster, Mechanic, for an invention for—"Improvements in machinery or apparatus for doubling or twisting yarns or threads of cotton and other fibrous materials." *Letters Patent sealed.*

ASBURY. 14th August 1863. **2018.** WILLIAM ASBURY, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in axles and axle boxes, and the parts of wheels immediately connected therewith." *Letters Patent sealed.*

HOFFMAN. 15th August 1863. **2019.** JOHN WILLIAM HOFFMAN, of Ridon Street, in the County of Middlesex, for an invention for—"Improvements in apparatus for producing optical illusions for stage effect in theatres or exhibitions." *Provisional protection only.*

HIM. 15th August 1863. **2020.** PIERRE FRANÇOIS LOUIS BIENVAUX HIM, of the Village of Le Cateau (Nord), France, for an invention for—"A waterproof preparation to make fabrics, thread, textile matters and others impenetrable against water." *Complete specification; Letters Patent sealed.*

YATES. 15th August 1863. **2021.** GEORGE YATES, of Oswaldwistle, in the County of Lancaster, Engine Driver, for an invention for—"An improved method of and apparatus for indicating the number of tubs or other measures or quantities of coal or other substance or material drawn from pits or mines." *Letters Patent sealed.*

DAVIES. 15th August 1863. **2022.** GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in furnaces for heating, flattening and annealing glass."—*A communication to him from abroad by Andrew Kesler Hay, of Winslow, New Jersey, United States of America.* *Letters Patent sealed.*

SCOTT. 15th August 1863. **2023.** EDWARD SCOTT, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in apparatus for governing or regulating the speed of engines."—*A communication to him from abroad by Arnold Winder, of Hard, in the Kingdom of Austria.* *Letters Patent sealed.*

PARKER. 15th August 1863. **2024.** ROBERT PARKER, of Atherton, in the County of Lancaster, Spindle and Flyer Maker, for an invention for—"Certain improvements in 'presser flyers' to be employed in preparing, spinning and doubling cotton and other fibrous materials." *Provisional protection only.*

SMITH. BOOTH. 15th August 1863. **2025.** ROBERT SMITH, of the firm of Messieurs Heywood, Higginbottom, Smith and Company, of the Hyde Road Paper Staining Works, in the City of Manchester, and JABEZ BOOTH, of Gorton, near Manchester, aforesaid, Manager, for an invention for—"Improvements in the manufacture of paper hangings." *Provisional protection only.*

LORD. 15th August 1863. **2026.** EDWARD LORD, of Todmorden, in the County of York, Machine Maker, for an invention for—"Certain improvements in machinery for preparing, spinning and doubling cotton and other fibrous substances." *Letters Patent sealed.*

FLAVELL. 15th August 1863. **2027.** FREDERICK FLAVELL, of Welton, near Daventry, in the County of Northampton, Machinist, for an invention for—"Improvements in shakers for thrashing machines." *Letters Patent sealed.*

LÜDEKE. 15th August 1863. **2028.** JOHANN ERNST FRIEDRICH LÜDEKE, of No. 2, Elizabeth Terrace, Islington, London, for an invention for—"Improvements in the means of keeping cameras or other apparatus steady when suspended to balloons." *Provisional protection only.*

BROOKS. 15th August 1863. **2029.** THOMAS BROOKS, of Wylds Rents, Long Lane, Bermondsey, in the County of Surrey, Engineer, for an invention for—"Improvements in means or apparatus for the production of charcoal and other products from refuse tan and other woody substances." *Provisional protection only.*

GRANTHAM. 15th August 1863. **2030.** JOHN GRANTHAM, of 31, Nicholas Lane, in the City of London, Civil Engineer, for an invention for—"Improvements in apparatus for manufacturing salt." *Provisional protection only.*

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NEWTON. 15th August 1863.

2031. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for printing."—*A communication to him from abroad by Benjamin Livermore, of Hartland, in the State of Vermont, United States of America.* *Letters Patent sealed.*

LIGHTBROWN. 15th August 1863.

2032. ROGER LIGHTBROWN, of Over Darwen, in the County of Lancaster, Manager, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

BENTALL. 15th August 1863.

2033. EDWARD HAMMOND BENTALL, of Heybridge, near Maldon, in the County of Essex, Agricultural Implement Maker, for an invention for—"Improved machinery for thrashing corn and other grain or seeds." *Letters Patent sealed.*

BOUSFIELD. 15th August 1863.

2034. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of cement."—*A communication to him from abroad by Samuel Hilton, a person resident at Providence, in the State of Rhode Island, in the United States of America.* *Letters Patent sealed.*

PARKER. 15th August 1863.

2035. AUGUSTUS WILLIAM PARKER, of Bristol Soap Works, Lewin Meade and Deep Street, Bristol, for an invention for—"Improvements in the manufacture of soap." *Letters Patent sealed.*

SMITH. 17th August 1863.

2036. JOHN SMITH, of Cheetham, in the City of Manchester, Bleacher, Dyer and Finisher, for an invention for—"Improvements in machinery for finishing woven fabrics." *Letters Patent sealed.*

DEARN. 17th August 1863.

2037. ALLEN MICHAEL DEARN, of Greenstead Works, Colchester, in the County of Essex, Engineer, for an invention for—"A new centrifugal disc mashing machine." *Letters Patent sealed.*

BONNEVILLE. 17th August 1863.

2038. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in engraving."—*A communication to him from abroad by Armand Mauchain, Manufacturer, of Paris, in the Empire of France, aforesaid.* *Provisional protection only.*

BONNEVILLE. 17th August 1863.

2039. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Office, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, W., in the County of Middlesex, for an invention for—"Improvements in the processes and preparations employed in spinning wool."—*A communication to him from abroad by Edmund Lepaintenr, Chemist, a person residing at Paris, in the Empire of France, aforesaid.* *Letters Patent sealed.*

LONGBOTTOM. 17th August 1863.

2040. WILLIAM LONGBOTTOM, of the Nelson Foundry, Barnsley, Yorkshire, Machinist, for an invention for—"An improved lubricator." *Provisional protection only.*

BAILLIE. 17th August 1863.

2041. ROBERT BAILLIE, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in reefing or furling the sails of vessels and in the apparatus to be employed therein." *Letters Patent sealed.*

LOFTUS. 17th August 1863.

2042. THOMAS LOFTUS, of Preston, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in apparatus for attaching to steam-boilers and flues for the consumption of smoke." *Letters Patent sealed.*

CROSLAND. 17th August 1863.

2043. JAMES STEAD CROSLAND, of Ashton-under-Lyne, in the County of Lancaster, Engineer, for an invention for—"Improvements in lubricating and in arrangements and mechanism for lubricating the bearings, journals or steps of spindles, shafts, axles and other mechanism." *Letters Patent sealed.*

BROADLEY. 18th August 1863.

2044. JAMES BROADLEY, of Saltaire, near Bradford, in the County of York, Overlooker to Messrs. Titus Salt, Sons & Co., of Saltaire, for an invention for—"Improvements inmeans or apparatus employed in weaving." *Letters Patent sealed.*

ARTHUR. 18th August 1863.

2045. JOSEPH ARTHUR, Doctor of Medicine, and Member of the Royal College of Surgeons, of London, of No. 1, Robert Terrace, Chelsea, in the County of Middlesex, for an invention for—"An improved apparatus for the prevention, cure and relief of hernia of every description, together with prolapsus uteri, uterine hemorrhage, hernia humoralis, and as a general support for enlargement of the abdomen from whatever cause proceeding." *Letters Patent sealed.*

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BRIGGS.
18th August 1863.

2046. JOHN BRIGGS, of Blackley, in the County of Lancaster, Engraver to Calico Printers and Small Ware Manufacturers, for an invention for—"Certain improvements in coating or covering crinoline steel." *Provisional protection only.*

BRENNAND.
18th August 1863.

2047. JOHN BRENNAND, of Burnley, in the County of Lancaster, Cotton Spinner, for an invention for—"An improved construction of fire bars and apparatus connected therewith." *Provisional protection only.*

ROBINSON.
18th August 1863.

2048. HENRY ROBINSON, of Skipton, in the County of York, for an invention for—"Improvements in limekilns." *Letters Patent sealed.*

DOBB.
18th August 1863.

2049. THOMAS DOBB, of Rotherham, in the County of York, for an invention for—"Improvements in chimney tops, which improvements are also applicable to coverings for ventilating shafts or flues for mines and other places." *Letters Patent sealed.*

CRUICKSHANK.
18th August 1863.

2050. ALEXANDER CRUICKSHANK, of Glen Park, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in the manufacture or production of food for cattle and all other domestic animals, poultry and game, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

YATES.
18th August 1863.

2051. JAMES YATES, of Rotherham, in the County of York, Iron Master, for an invention for—"Improvements in the manufacture and fitting or securing of armour plates, blocks or bars, and in the machinery or apparatus employed therein, parts of which improvements are applicable to heavy forgings generally." *Letters Patent sealed.*

BROOMAN.
18th August 1863.

2052. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of hats, caps and bonnets, and in apparatus employed therein."—*A communication to him from abroad by Eugene Couset, of Nancy, France.* *Letters Patent sealed.*

BROOMAN.
18th August 1863.

2053. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved method of and apparatus for treating molasses, syrups, saccharine juices and other products."—*A communication to him from abroad by Auguste Pierre Dubrunfaut, of Bercy, France.* *Letters Patent sealed.*

FAURE.
18th August 1863.

2054. JEAN BAPTISTE VINCENT FAURE, of Aschaffenburg, in Bavaria, for an invention for—"Improvements in pen and ink holders." *Provisional protection only.*

MCCORMICK.
18th August 1863.

2055. CYRUS HALL MCCORMICK, of Chicago, in the United States of America, Manufacturer of Reaping Machines, for an invention for—"Improvements in reaping machines." *Letters Patent sealed.*

WILSON.
18th August 1863.

2056. CHARLES GEORGE WILSON, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads." *Letters Patent sealed.*

JACKSON.
19th August 1863.

2057. WILLIAM JACKSON, Mechanic, 4, Spring Terrace, York Road, Lambeth, London, for an invention for—"Improved arrangements of the parts in sewing-machines for using shoemaker's wax thread, suitable for heavy boot or other leather work to which it may be applied." *Letters Patent sealed.*

SONNHAMMER.
19th August 1863.

2058. CHARLES SONNHAMMER, of Regent Street, in the County of Middlesex, for an invention for—"An improved fan." *Letters Patent sealed.*

HOWARD.
19th August 1863.

2059. THOMAS HOWARD, of Hyde, in the County of Chester, Cotton Manufacturer, for an invention for—"Certain improvements in machinery for spinning cotton, flax, wool, silk and other fibrous substances." *Letters Patent sealed; no specification filed.*

SCOTT.
19th August 1863.

2060. THOMAS SCOTT, of Nelson Square, in the County of Surrey, Engineer, for an invention for—"Improvements in the construction of floating docks or apparatus for lifting ships and other bodies." *Provisional protection only.*

BOUSFIELD.
19th August 1863.

2061. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for feeding weft in hair cloth looms."—*A communication to him from abroad by Charles Bradley, a person resident at Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

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SANDERSON.
19th August 1863.

2062. SIMON SANDERSON, of High Street, Shoreditch, in the County of Middlesex Merchant, for an invention for—"An improved fastening for leggings, stays or other articles."
Provisional protection only.

BONELLI.
COOK.
19th August 1863.

2063. GAETANO BONELLI, of Turin, in the Kingdom of Italy, Engineer, and HENRY COOK, of Gloucester Square, in the County of Middlesex, Gentleman, for an invention for—"An improved mode of and apparatus for producing by the aid of photography optical illusions of moving animals and bodies."
Provisional protection only

JACKSON.
19th August 1863.

2064. RICHARD HUGHES JACKSON, of the Olive Branch Works, Meadow Lane, Leeds, in the County of York, Tool Maker and Machinist, for an invention for—"Improvements in machinery for sawing wood and other fibrous substances."
Provisional protection only.

SPENCER.
20th August 1863.

2065. GEORGE SPENCER, of 6, Cannon Street West, London, Civil Engineer, for an invention for—"Improved solutions to be used in the manufacture of paints and the preservation of wood, stone and metallic surfaces, and in the preservation and waterproofing of fibrous materials generally."—*A communication to him from abroad by Richard Eaton, of the City of Montreal, Canada.* *Provisional protection only.*

GALLOWAY.
GALLOWAY.
20th August 1863.

2066. WILLIAM GALLOWAY, and JOHN GALLOWAY, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in steam-boilers and in steam and water guages for the same."
Letters Patent sealed.

HALLSWORTH.
PLATT.
20th August 1863.

2067. SAMUEL HALLSWORTH, of Elland, near Halifax, in the County of York, and THOMAS PLATT, of Fairfield, near Manchester, in the County of Lancaster, for an invention for—"Improvements in the manufacture of certain colouring matters known as prussian blue, berlin blue, paris blue, china blue, and turnbull's blue."
Provisional protection only.

HAMILTON.
20th August 1863.

2068. WILLIAM HAMILTON, of 45, Ship Street, Brighton, Upholsterer, for an invention for—"Improvements in the manufacture of spring mattresses."
Letters Patent sealed.

FLEMING.
20th August 1863.

2069. JAMES FLEMING, of Newlands Fields, in the County of Renfrew, North Britain, Bleacher, for an invention for—"Improvements in preserving the colours of dyed fabrics."
Letters Patent sealed.

PLATT.
RICHARDSON.
20th August 1863.

2070. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in machinery or apparatus for cleaning cotton and wool from seeds, burrs or other such extraneous matters."
Letters Patent sealed.

PLATT.
RICHARDSON.
20th August 1863.

2071. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in machinery or apparatus for winding narrow laps of wool."
Letters Patent sealed.

NEWTON.
20th August 1863.

2072. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of cartridges."—*A communication to him from abroad by Albert Hook, of the City of New York, United States of America.* *Letters Patent sealed.*

HAMMOND.
20th August 1863.

2073. CHARLES DANIEL HAMMOND, of Charlotte Street, Bedford Square, in the County of Middlesex, Doctor of Medicine, for an invention for—"Improvements in apparatus for the treatment of certain bodily ailments."
Letters Patent sealed.

HILL.
21st August 1863.

2074. JAMES FRANCE HILL, of 23, Little St. Andrew Street, Upper St. Martin's Lane, London, for an invention for—"An improved ventilating gas lamp or gasalier."
Provisional protection only.

ECCLESTON.
21st August 1863.

2075. JAMES ECCLESTON, of Manchester, in the County of Lancaster, Organ Builder, for an invention for—"Improvements in apparatus for economizing or regulating water power used for blowing organs or harmoniums, which improvements are also applicable to other purposes where an irregular motive-power is desired."
Provisional protection only.

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CASHIN. 21st August 1863.

2076. THOMAS FREDERICK CASHIN, Civil Engineer, of Sheffield, in the County of York, for an invention for—"Improved means of communication between the passengers, guard and driver of a railway train in motion."
Provisional protection only.

THOMPSON. 21st August 1863.

2077. ROBERT THOMPSON, of New Charlton, in the County of Kent, for an invention for—"Improvements in machinery for planing curved, curvilinear, irregular and other forms in iron, steel and other metals." *Letters Patent sealed.*

BROOMAN. 21st August 1863.

2078. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in expressing and filtering oil from seeds and liquids from other substances containing the same, and in apparatus employed therein."—*A communication to him from abroad by Guillaume Cregut and Tschiffeli, Brothers, all of Marseilles, France.*" *Letters Patent sealed.*

EVANS. 21st August 1863.

2079. WILLIAM EVANS, of Belgrave Street, Commercial Road East, in the County of Middlesex, for an invention for—"An improved artificial fuel."
Letters Patent sealed.

GRIFFITHS. 21st August 1863.

2080. ROBERT GRIFFITHS, of Mornington Road, Regent's Park, in the County of Middlesex, and of Coppa Colliery, Mold, in the County of Flint, Engineer, for an invention for—"Improvements in the construction of retorts or ovens for extracting oil from certain descriptions of cannel coal or other bituminous substances."
Letters Patent sealed.

POPE. 21st August 1863.

2081. EDMOND POPE, of Clonmel, Ireland, Gunmaker, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

LANGE. 21st August 1863.

2082. JEAN BAPTISTE CHARLES LANGE, of Paris, in the Department of the Seine, France, Householder, for an invention for—"An improved apparatus for indicating or registering the speed or distance travelled by all kinds of vehicles, which said apparatus is also applicable to engines, water-wheels and prime motors of any description." *Letters Patent sealed.*

PEGRAM. 22nd August 1863.

2083. THOMAS PEGRAM, of No. 22, Cardington Street, in the Parish of Saint Pancras, in the County of Middlesex, Photographic Artist, for an invention for—"A plate holder for the photographic camera adapted to carry different sized plates, each plate being on the same plane and in the same focus."
Provisional protection only.

BROOMAN. 22nd August 1863.

2084. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in closing powder canisters and other vessels."—*A communication to him from abroad by Joseph Sagnes, of Toulon, France.* *Letters Patent sealed.*

WATSON. 22nd August 1863.

2085. ALFRED WATSON, of King Street, in the City of London, Engineer, for an invention for—"An improved method of and apparatus for inserting pictures in and withdrawing them from photographic albums." *Letters Patent sealed.*

BROOMAN. 22nd August 1863.

2086. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A new metallic alloy."—*A communication to him from abroad by Henri Micolon, of Paris, France.*
Letters Patent sealed.

MARTIN. 22nd August 1863.

2087. LOUIS EMILE CONSTANT MARTIN, of No. 32, Albion Street, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for heating and purifying water." *Letters Patent sealed.*

MOORE. 22nd August 1863.

2088. SIEGMUND MOORE, of Liverpool Street, Bishopsgate Street, in the County of Middlesex, for an invention for—"Improvements in the means of and apparatus for electroplating, said apparatus being also applicable to medical purposes."
Letters Patent sealed.

SIMLICK. 22nd August 1863.

2089. HENRY JOSEPH SIMLICK, of Old Ford Road, Bow, in the County of Middlesex, for an invention for—"Improvements in the manufacture of fusees or matches employed to light cigars and pipes." *Provisional protection* NOT *granted.*

BENSON. GREENWOOD. 22nd August 1863.

2090. WILLIAM BENSON, a Partner in the firm of Bradley and Benson, of Leeds, in the County of York, Machine and Tool Makers, and PETER WILLIAM GREENWOOD, of Leeds, aforesaid, Mule Spinner, for an invention for—"Improvements in preparing and spinning wool and other similar fibres." *Letters Patent sealed.*

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BATT.
24th August 1863.

2091. HENRY BATT, of 21, Charlton King's Road, Kentish Town, in the Parish of St. Pancras, and in the County of Middlesex, for an invention for—"Improvements in roughing horses without taking off the shoe." *Provisional protection only.*

JOBSON.
24th August 1863.

2092. ALFRED JOBSON, of Darlington, in the County of Durham, Colliery Agent, for an invention for—"Improvements in machinery for drawing or discharging coke ovens and loading coke wagons." *Letters Patent sealed.*

GUILLEMOT.
24th August 1863.

2093. LOUIS GUILLEMOT, 42, Rue du Moulin a Vent, à Poitiers, Departement de la Vienne, France, for an invention for—"An improved machine for obtaining perpetual motion." *Letters Patent sealed.*

GRASSET.
24th August 1863.

2094. CLAUDE SOSTHÈNE GRASSET, residing at Larnaca, Cyprus, in the Empire of Turkey, attached to the French Phenissian Mission in Syria, for an invention for—"An improved double Mac Carty gin or machinery used for cleaning cotton from its seeds." *Provisional protection only.*

CAPELLO.
24th August 1863.

2095. ANGE CAPELLO, of No. 4, Rue du Repentir, Marseilles, in the Empire of France, Currier, for an invention for—"An improved method of and apparatus for glazing morocco leather." *Letters Patent sealed.*

STACK.
24th August 1863.

2096. FREDERICK RICE STACK, late Captain in the 65th Regiment of Foot, and Major of Brigade, at Auckland, New Zealand, now residing at Belgrave Villa, Finchley, in the County of Middlesex, for an invention for—"Improvements in the construction of military bridges, piers, landing stages and escalading apparatus." *Letters Patent sealed.*

McKILLOP.
24th August 1863.

2097. HENRY FREDERICK McKILLOP, of Belvedere, in the County of Kent, Captain in the Royal Navy, for an invention for—"Improvements in cleansing ships' bottoms." *Letters Patent sealed.*

BROOMAN.
24th August 1863.

2098. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in air and gas engines."—*A communication to him from abroad by Auguste Nicol Otto, of Cologne, Prussia.* *Letters Patent sealed.*

HETT.
BASSET.
25th August 1863.

2099. ALEXANDER HETT, of the City of London, Doctor of Medicine, and FREDERICK WILLIAM BASSET, of Camberwell, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in preserving animal substances and animal and other substances used for food." *Letters Patent sealed.*

LEWIS.
WALKER.
WAYNE.
25th August 1863.

2100. GEORGE EDWARD LEWIS, of Birmingham, in the County of Warwick, Gun Manufacturer, and HENRY WALKER, of Birmingham, aforesaid, Machinist, and JOSEPH BLOUNT WAYNE, of Birmingham, aforesaid, Machinist, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

GEDGE.
25th August 1863.

2101. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery or apparatus to be used in the manufacture of candles."—*A communication to him from abroad by Chretien Haffner, of Thann, in the Empire of France.* *Provisional protection only.*

FRIEND.
26th August 1863.

2102. JOHN WALTER FRIEND, of Freemantle, Southampton, for an invention for—"Improvements in the construction of gas meters and in apparatus to be employed in connection therewith for regulating the pressure and flow of gas to the same." *Complete specification; Letters Patent sealed.*

THOMAS.
MARSHALL.
26th August 1863.

2103. JAMES THOMAS, Mechanic, and WILLIAM FIELDING MARSHALL, Reed Maker, both of Shipley, in the West Riding of the County of York, for an invention for—"Improvements in apparatus for spinning." *Letters Patent sealed.*

HOPKINS.
26th August 1863.

2104. THOMAS HOPKINS, junior, of White Hart Place, Kennington Cross, in the County of Surrey, Coach Beader, for an invention for—"Improvements in carriage door handles." *Letters Patent sealed.*

TAYLOR.
26th August 1863.

2105. JOSHUA TAYLOR, of Gomersall, near Leeds, in the County of York, for an invention for—"Improvements in the manufacture of soap."—*A communication to him from abroad by Giuseppe Negro, of Piedmont, in the Kingdom of Italy.* *Provisional protection only.*

KESSLER.
26th August 1863.

2106. JACQUES LOUIS KESSLER, of Paris, in the Empire of France, Engineer, for an invention for—"Improvements in apparatus for evaporating and distilling." *Letters Patent sealed.*

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FATTORINI. 26th August 1863.

2107. SANTINI FATTORINI, of Rue Joubert, No. 3, in the City of Paris, Empire of France, Optician Mathematician, for an invention for—"A new division of time and the application thereof to mathematical and other instruments."
Provisional protection only.

WESTHORP. 26th August 1863.

2108. THEOPHILUS WESTHORP, of the Falcon Works, Bromley, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for preparing cut rope strands or yarns for carding into oakum." *Letters Patent sealed.*

JOHNSON. BEDSON. 26th August 1863.

2109. RICHARD JOHNSON, of Manchester, in the County of Lancaster, Iron and Wire Manufacturer, and GEORGE BEDSON, of the same place, Manager, for an invention for—"Improvements in pointing wire rods or wire in order to facilitate thei introduction into draw plates." *Letters Patent sealed.*

NEWTON. 26th August 1863.

2110. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for extracting coal ores or other minerals or substances from mines, which apparatus may be also employed for raising and lowering the workmen and their tools or implements."—*A communication to him from abroad by Melchior Colson, of Rue St. Sebastien, Paris, in the Empire of France.* *Provisional protection only.*

PLATT. RICHARDSON. 26th August 1863.

2111. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in stoves or grates." *Letters Patent sealed.*

FRY. 26th August 1863.

2112. JAMES FRY, of Chesham, in the County of Buckingham, Engineer, for an invention for—"Improvements in mashing machinery used in making fermented liquors." *Provisional protection only.*

BLAKE. 26th August 1863.

2113. DAVID BLAKE, of Manchester, in the County of Lancaster, for an invention for—"Improvements in shaping and punching metallic articles, and in the machinery or apparatus to be employed therein."—*A communication to him from abroad by Levi Dodge, of Waterford Co., Saratoga, State of New York, U.S.A.*
Letters Patent sealed.

JOHNSON. 26th August 1863.

2114. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in obtaining and applying motive-power."—*A communication to him from abroad by Pierre Gardere, Manager of Saw Mills, and Charles Patek, Gentleman, both of Paris, in the Empire of France.* *Letters Patent sealed.*

BOURNE. 27th August 1863.

2115. THEODORE BOURNE, of the City, County, and State of New York, United States of America, for an invention for—"Improved method of storing and holding petroleum and other oils, naphtha and other products of distillation containing essential oils."—*A communication to him by Seth Haskell Ingalls, of the City of New Bedford, County of Bristol, and State of Massachusetts, United States of America, the inventor.* *Letters Patent sealed.*

PRAGST. 27th August 1863.

2116. FRANCIS PRAGST, of Moscow, in the Empire of Russia, at present residing at Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in steam-engines and in the mode of utilizing steam."
Letters Patent sealed.

CLARK. 27th August 1863.

2117. JOHN CLARK, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Certain improvements in break blocks for railway and other carriages, and in the means of applying the same." *Letters Patent sealed.*

WARD. 27th August 1863.

2118. JAMES WARD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in diving apparatus." *Letters Patent sealed.*

RICHARD. 27th August 1863.

2119. CHARLES RICHARD, of No. 10, Rue de la Fidélité, Paris, Gentleman, for an invention for—"A new or improved apparatus for lighting and cutting the ends of cigars." *Letters Patent sealed.*

NEWTON. 27th August 1863.

2120. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Charles Coffey Alger, of Hudson, Colombia County, State of New York, United States of America.*
Letters Patent sealed.

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RICHARDS. 27th August 1863.

2121. GEORGE RICHARDS, of 2, Caroline Street, Bedford Square, in the County of Middlesex, Esquire, for an invention for—"Improvements in the construction of ordnance and fire-arms, and in the projectiles to be used therewith."
Provisional protection only.

DAVIES. 28th August 1863.

2122. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of iron and steel from the cinders and refuse of puddling and other furnaces and from certain kinds of ores."—*A communication to him from abroad by Antoine Leonard Fleury, of Philadelphia, Pennsylvania, in the United States of America.*
Letters Patent sealed.

BELL. 28th August 1863.

2123. ROBERT BELL, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improved measuring apparatus for looms."
Letters Patent sealed.

SHAW. 28th August 1863.

2124. JOHN SHAW, of Junction Implement Works, New Wortley, Leeds, Implement Maker, for an invention for—"Improvements in machines for cutting or reducing turnips or other roots as food for animals." *Letters Patent sealed.*

VICKERS. 28th August 1863.

2125. EDWARD VICKERS, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in the manufacture of steel."
Provisional protection only.

AMOUROUS. 28th August 1863.

2126. EDOUARD AMOUROUS, of No. 4, South Street, Finsbury, London, Gentleman, for an invention for—"Improvements in apparatus for separating solid from fluid fecal matters." *Letters Patent sealed.*

MULET. 28th August 1863.

2127. LOUIS ALEXANDRE MULET, of Rue St. Charles, No. 1, in the Thernes, Paris, in the Empire of France, Merchant, for an invention for—"An improved method of shoeing horses and covering the feet or hoofs of other domestic animals with hardened india-rubber, gutta percha and other improved similar materials."
Provisional protection only.

ALISON. 28th August 1863.

2128. JOHN ALISON, of Reigate, in the County of Surrey, Gentleman, for an invention for—"Improvements in apparatus for tilling land, which improvements are chiefly applicable when steam power is employed." *Letters Patent sealed.*

HARRATT. 28th August 1863.

2129. CHARLES HARRATT, of Hornsey Lane, Highgate, in the County of Middlesex, for an invention for—"Improvements in apparatus for tilling land."
Letters Patent sealed.

WALLS. 28th August 1863.

2130. JOSEPH WALLS, of Farrington, near Preston, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-boilers and in apparatus connected therewith." *Letters Patent sealed; no specification filed.*

PENNELL. 29th August 1863.

2131. HENRY CHOLMONDELEY PENNELL, of Weybridge, in the County of Surrey, Gentleman, for an invention for—"Improvements in the construction of skates." *Letters Patent sealed.*

PUTNAM. 29th August 1863.

2132. HENRY WILLIAM PUTNAM, of the City of New York, United States, Manufacturer, for an invention for—"An improved machine for wringing clothes."
Letters Patent sealed.

LOWRY. 29th August 1863.

2133. GEORGE LOWRY, of the Stanley Street Works, Salford, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in and applicable to cotton gins." *Letters Patent sealed.*

WILLIAMS. 29th August 1863.

2134. THOMAS WILLIAMS, of the City of Manchester, in the County of Lancaster, Tobacco Manufacturer, for an invention for—"Improvements in machinery or apparatus for crushing and flattening the stalks of tobacco and other substances."
Provisional protection only.

TINGEY. 29th August 1863.

2135. WILLIAM TINGEY, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in printing carpets, piled fabrics, druggets and other similar articles." *Provisional protection only.*

WILLIAMS. 29th August 1863.

2136. THOMAS WILLIAMS, of the City of Manchester, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in machinery or apparatus for steaming and opening cotton and other fibrous materials."
Provisional protection only.

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WHITWORTH. WRIGLEY. 29th August 1863.

2137. WILLIAM WHITWORTH, Engineer, and JOSEPH WRIGLEY, both of Sowerby Bridge, near Halifax, in the County of York, for an invention for—"Improvements in or applicable to the furnaces of steam-boilers." *Letters Patent sealed.*

SPEIRS. BOYD. KIRKWOOD. 29th August 1863.

2138. DAVID SPEIRS, Manufacturer, ALEXANDER BOYD, Pattern Maker, and JAMES KIRKWOOD, Weaver and Mechanic, all of Paisley, in the County of Renfrew, North Britain, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

AGNEW. 29th August 1863.

2139. ARTHUR AGNEW, of Welshpool, in the County of Montgomery, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

HOFFMANN. 29th August 1863.

2140. FREDERICK CHARLES PHILLIP HOFFMANN, of Newgate Street, in the City of London, Engineer, for an invention for—"Improvements in shears for cutting metals and other substances." *Letters Patent sealed.*

WELDON. 29th August 1863.

2141. WALTER WELDON, of 3, Falcon Court, Fleet Street, in the City of London, Publisher, for an invention for—"Improvements in apparatus for aërial navigation." *Letters Patent sealed.*

ROWAND. 29th August 1863.

2142. ALEXANDER ROWAND, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in evaporating fluid solutions, and in the machinery, apparatus or means employed therein." *Letters Patent sealed.*

DODGE. 29th August 1863.

2143. JAMES DODGE, of Waterford, Saratoga County, State of New York, United States of America, Mechanical Engineer, at present residing in the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for grinding and polishing metallic articles." *Letters Patent sealed.*

MARTIN. 29th August 1863.

2144. LOUIS EMILE CONSTANT MARTIN, of No. 32, Albion Street, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for generating steam and for generating gases to be used for heating steam-boilers or for other purposes." *Letters Patent sealed.*

ATTOCK. 31st August 1863.

2145. GEORGE ATTOCK, Engineer, of Stratford, Essex, for an invention for—"Improvements in assistant bearing springs for locomotive engines, railway carriages, waggons and trucks." *Letters Patent sealed.*

KRAMER. 31st August 1863.

2146. HENRY EDWARD KRAMER, of Leipsic, in the Kingdom of Saxony, Printer, for an invention for—"Improvements in printing in colours pictures or devices to be used in ornamenting porcelain, stoneware, earthenware or any other substances where the colours can be annealed or melted or burnt in." *Letters Patent sealed.*

BRAENDLIN. 31st August 1863.

2147. FRANCIS AUGUSTUS BRAENDLIN, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in breach-loading fire-arms." *Letters Patent sealed.*

BEBBINGTON. HAMPSON. 31st August 1863.

2148. GEORGE BEBBINGTON, of Manchester, in the County of Lancaster, Salesman, and JONATHAN ROBERT HAMPSON, of the same place, Packer for an invention for—"Certain improvements in means to be employed for securing the ends of bands in packing 'bale goods,' and in machinery for manufacturing 'rivets' to be employed for the purpose, and also in apparatus for forming apertures in the aforesaid bands or hoops." *Provisional protection only.*

BURNETT. 31st August 1863.

2149. BENJAMIN LILE BURNETT, of Teignmouth, in the County of Devon, Wine Merchant, for an invention for—"Improved arrangements for removing the fuel from stoves or grates and for facilitating the extinguishing of the fires used therein." *Letters Patent sealed.*

GEDGE. 31st August 1863.

2150. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved watch."—*A communication to him from abroad by Charles Jaeger, of Paris, in the Empire of France.* *Provisional protection only.*

NEWTON. 31st August 1863.

2151. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and apparatus to be used in sewing by machinery."—*A communication to him from abroad by Charles Frederick Bosworth, of Milford, New Haven County, State of Connecticut, United States of America.* *Letters Patent sealed.*

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NEWTON. 31st August 1863. **2152.** ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved machinery for sawing irregular forms of wood."—*A communication to him from abroad by Henry Vrooman, of New York, in the United States of America.* *Letters Patent sealed.*

MILES. 31st August 1863. **2153.** JOHN MILES, of Hastings, in the County of Sussex, Cutler, for an invention for—"Improvements in traps for catching rats and mice, rabbits and other animals and birds." *Letters Patent sealed.*

PETTIT. 31st August 1863. **2154.** GEORGE BROOKS PETTIT, of Oxford Street, in the County of Middlesex, Gas Engineer, for an invention for—"A method of preparing mica and talc in order to render them applicable to articles of wearing-apparel and to ornamental purposes." *Provisional protection only.*

ROBERTS. 31st August 1863. **2155.** MARTYN JOHN ROBERTS, of Pendarren House, near Crickhowell, in the County of Brecon, Esquire, for an invention for—"Improvements in the arrangement or fixing of axles for railway and other carriages." *Provisional protection only.*

SNIDER. 1st September 1863. **2156.** JACOB SNIDER, junior, of Dorset Street, in the County of Middlesex, Merchant, for an invention for—"Improvements in breech-loading and other ordnance, part of which is applicable to the utilizing of old smooth-bore cannon, and in projectiles to be used therewith." *Letters Patent sealed*

SHORROCK. SHORROCK. 1st September 1863. **2157.** CHRISTOPHER SHORROCK, Manufacturer, and WILLIAM SHORROCK, Manager, both of Over Darwen, in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

RUSSELL. 1st September 1863. **2158.** GEORGE RUSSELL, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in apparatus for cooking and for obtaining fresh water for use on shipboard and otherwise." *Letters Patent sealed.*

CLARK. 1st September 1863. **2159.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in hydraulic apparatus."—*A communication to him from abroad by Auguste Desgoffe and Achille Ollivier, Engineers, both of 29, Boulevert St. Martin, Paris.* *Letters Patent sealed.*

JOVOT. 1st September 1863. **2160.** PIERRE JOVOT, jeune, of Paris, France, Manufacturer, for an invention for—"An improved fabric and improvements in looms for manufacturing the same." *Letters Patent sealed.*

BANKS. 1st September 1863. **2161.** JOHN HENRY BANKS, of Radnor Street, Hulme, in the City of Manchester, Church Furniture Manufacturer, for an invention for—"Improvements in the construction of benches or desks for schools, churches and other similar purposes." *Letters Patent sealed.*

BOUSFIELD. 1st September 1863. **2162.** GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of illuminating gas."—*A communication to him from abroad by Dr. William Elmer, a person resident at New York, in the United States of America.* *Letters Patent sealed.*

ERICH. 1st September 1863. **2163.** THEODOR ERICH, of No. 77, Newgate Street, in the City of London, for an invention for—"Improvements in machinery for pressing peat."—*A communication to him from abroad by Christian Augustus Erich, a person resident at Munich, in the Kingdom of Bavaria.* *Letters Patent sealed.*

EWENS. 1st September 1863. **2164.** GEORGE WHIPPEN EWENS, of Sherborne Lodge, Doris Street East, Kennington Cross, in the County of Surrey, for an invention for—"Improvements in the manufacture of wadding, paper and felted fabrics, and in the preparation of vegetable fibres to be used in such manufactures." *Letters Patent sealed.*

PINNER. 2nd September 1863. **2165.** MORITZ PINNER, of No. 12, South Terrace, Grosvenor Park, Camberwell, in the County of Surrey, for an invention for—"The manufacture of a flexible translucent material or fabric to be used as a partial substitute for glass."—*A communication to him from abroad by Christoph Sussegger, of the City, County and State of New York, United States of America.* *Provisional protection only.*

LEWIS. 2nd September 1863. **2166.** JOSEPH LEWIS, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in machinery or apparatus for preparing and drying clay, and also in machinery to be employed in the manufacture of bricks and tiles." *Letters Patent sealed.*

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YOUNG.
2nd September 1863.

2167. ROBERT YOUNG, of Glasgow, in the County of Lanark, North Britain, Millwright and Engineer, for an invention for—"Improvements in separating and elevating apparatus for grain or granular matters." *Letters Patent sealed.*

COLLIER.
2nd September 1863.

2168. ELIZABETH COLLIER, of High Street, Leicester, in the County of Leicester, Milliner and Crinoline Manufacturer, for an invention for—"Improvements in crinolines and crinoline fastenings." *Letters Patent sealed.*

SIMS.
2nd September 1863.

2169. REUBEN SIMS, of the firm of Picksley, Sims and Company, Bedford Foundry, Leigh, in the County of Lancaster, Agricultural Implement Makers and Iron Founders, for an invention for—"Improvements in reaping and mowing machines." *Provisional protection only.*

CORLETT.
2nd September 1863.

2170. CHARLES HARVEY CORLETT, of Güstrow, in the Grand Duchy of Mecklenburg Schwerin, Civil Engineer, for an invention for—"Improvements in valves, taps or cocks." *Letters Patent sealed.*

ALCAN.
2nd September 1863.

2171. EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"A new method of and apparatus for feeding wool and other textile and filamentous substances into carding, combing and other machines for treating such substances."—*A communication to him from abroad by Jean Sebastien Bolette, of Gaffontaine, Cornesse, Belgium.* *Letters Patent sealed.*

HOFFMANN.
2nd September 1863.

2172. FREDERICK CHARLES PHILLIP HOFFMANN, of Newgate Street, in the City of London, Engineer, for an invention for —"Improvements in machines for crushing hard substances, for washing ores and minerals, and for separating earth and earthy matter from solid substances." *Provisional protection only.*

JACKSON.
3rd September 1863.

2173. CHARLES JACKSON, of Birmingham, in the County of Warwick, Engineer and Machinist, for an invention for —"Improvements in bolts for fastening doors, windows, shutters, and for other like purposes." *Letters Patent sealed.*

DURAND.
3rd September 1863.

2174. AMAND LOUIS DURAND, of No. 10, Rue de la Fidelité, Paris, Merchant, for an invention for—"Certain improvements in the manufacture of nails and other similar articles." *Provisional protection only.*

BEAUMONT.
3rd September 1863.

2175. ANDRÉ ALEXANDRE BEAUMONT, of 2, Rue Sainte Appoline, Paris, (Empire of France), for an invention for—"A new or improved engine for raising liquids." *Letters Patent sealed.*

BOULTON.
WORTHINGTON.
3rd September 1863.

2176. WILLIAM BOULTON, Iron Founder, and JOSEPH WORTHINGTON, Engineer, both of Burslem, in the County of Stafford, for an invention for — "An improved method of making and inlaying encaustic tiles or other plastic articles and substances." *Letters Patent sealed.*

BAILLY.
3rd September 1863.

2177. NICOLAS BAILLY, of the Town of Vesoul, in the Empire of France, Agent of the Eastern Railway, for an invention for —"Improvements in the application of rolling friction to the axle boxes and journals of running shafts, and axletrees of machines and vehicles of all descriptions, for lessening the resistance to the motion."—*The result partly of a communication made to him by Charles Durand, a person resident at Jussey, a town of France, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

JOLLIFFE.
JOLLIFFE.
GRAHAM.
TAYLOR.
3rd September 1863.

2178. WILLIAM JOLLIFFE and THOMAS JOLLIFFE, both of Liverpool, in the County of Lancaster, Steam Boat Owners, and WILLIAM GRAHAM, of the same place, Ships' Joiner, and HENRY TAYLOR, of the same place, Ships' Joiner, for an invention for —"Improvements applicable to paddle and other propelling wheels for navigable vessels." *Provisional protection only.*

BONNEVILLE.
3rd September 1863.

2179. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for —"An improved mode of attaching horses to carriages or other vehicles and apparatus therefor."—*A communication from Jean François Frederic Beguin, a person residing at the Rue Neuve Popincourt, Paris, in the Empire of France, aforesaid.*
Complete specification; Letters Patent sealed.

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BONNEVILLE.
3rd September 1863.

2180. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"An improved machine for glossing and glazing all kinds of threads."—*A communication from Alfred Julien Thiriez, Edouard Julien Thiriez, and Victor Charles Julien Thiriez, persons residing at the Rue du Percke, Paris, in the Empire of France, aforesaid.* *Complete specification; Letters Patent sealed.*

NEWTON.
3rd September 1863.

2181. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for cleaning and decorticating grain and seeds."—*A communication to him from abroad by Adolphe Rousseau, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

LOEBL.
PICK.
3rd September 1863.

2182. JOSEPH LOEBL, and IGNAZ PICK, both of Scott's Yard, Bush Lane, in the City of London, Merchants, for an invention for—"Improvements in fastening gloves." *Letters Patent sealed.*

THORNHILL.
4th September 1863.

2183. CHARLES THORNHILL, of Sheffield, in the County of York, Merchant, for an invention for—"A new or improved method of adapting steel or other suitable metallic wire to be used instead of animal bristles or hair in sewing boots, shoes, saddlery and leather works generally." *Provisional protection only.*

KELVEY.
HOLLAND.
4th September 1863.

2184. CHARLES GRANT KELVEY, of Rock Ferry, in the County of Chester, Watch Manufacturer, and WILLIAM HOLLAND, of the same place, Manager, for an invention for —"Improvements in the construction of chronometers and other time-keepers." *Letters Patent sealed.*

HENDRY.
COUTTS.
4th September 1863.

2185. JOHN HENDRY, and WILLIAM COUTTS, both of the City and County of Aberdeen, North Britain, Merchants, for an invention for—"Improvements in furnaces." *Provisional protection only.*

FISHER.
4th September 1863.

2186. THOMAS FISHER, of No. 7, Remington Street, City Road, in the County of Middlesex, for an invention for—"Improvements in spring balances where spiral springs are used." *Letters Patent sealed.*

LORBERG.
5th September 1863.

2187. WILLIAM LORBERG, of No. 4, Wyld's Rents, Bermondsey, in the County of Surrey, Analytical Chemist, for an invention for — "Improvements in the manufacture of gas and other substances from tan and similar materials." *Letters Patent sealed.*

HARGREAVES.
5th September 1863.

2188. GEORGE HARGREAVES, of Shipley, in the Parish of Bradford, in the County of York, Worsted Spinner and Manufacturer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

MILLBOURN.
5th September 1863.

2189. SAMUEL MILLBOURN, of Wallington Paper Mill, Carshalton, in the County of Surrey, Paper Maker, for an invention for—"Improvements in the preparation of materials for the manufacture of paper, and in the construction of machinery employed for such purposes." *Provisional protection only.*

NORTON.
5th September 1863.

2190. WILLIAM NORTON, of Holly Bank, near Arva, in the County of Cavan, Gentleman, for an invention for—"Improvements in laying and supporting submarine telegraph cables." *Provisional protection only.*

MOODY.
MOODY.
5th September 1863.

2191. THOMAS MOODY, of Wincanton, in the County of Somerset, Gentleman, and EDWARD TOMS MOODY, of Chelsea Villas West, Brompton, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the generation and production of motive-power to be applied generally and in its special application to the propulsion of vessels." *Provisional protection only.*

ROWELL.
5th September 1863.

2192. JOSEPH ROWELL, of the City and County of Aberdeen, North Britain, Manufacturer, for an invention for—"Improvements in the manufacture and construction of fences, part of which are also applicable to the manufacture and construction of gate-posts, and to poles and posts used for telegraph and signal purposes, and for stretching telegraph wires." *Letters Patent sealed.*

SMITH.
5th September 1863.

2193. THOMAS SMITH, of Wolverhampton, in the County of Stafford, Merchant, for an invention for—"An improved wagon break." *Provisional protection only.*

BATT.
5th September 1863.

2194. RICHARD BATT, of Waterhouse Mill, Milnthorpe, in the County of Westmoreland, Paper Manufacturer, for an invention for —"Improvements in paper making machinery." *Letters Patent sealed.*

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ADAMES.
5th September 1863.

2195. CHARLES HENRY ADAMES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of lids or covers for certain articles of hollow ware." *Letters Patent sealed.*

RENNIE.
5th September 1863.

2196. GEORGE BANKS RENNIE, of Holland Street, Blackfriars, Engineer, for an invention for—"Improvements in the construction of floating docks and pontoons, and the means of cleaning, painting or repairing them." *Letters Patent sealed.*

MILLS.
BOOTH.
CLEGG.
7th September 1863.

2197. FREDERICK MILLS, of Heywood, in the County of Lancaster, Machine Maker, THOMAS BOOTH, of the same place, Mechanic, and THOMAS CLEGG, of the same place, Foreman, for an invention for—"Improvements in machinery for preparing and spinning cotton and other fibrous substances." *Letters Patent sealed.*

YORK.
7th September 1863.

2198. JOSIAS BULL YORK, of Coleshill, in the County of Warwick, Gentleman, for an invention for—"Improvements in privies or closets to be used in place of water-closets." *Letters Patent sealed.*

SINGTON.
7th September 1863.

2199. NATHAN SINGTON, of Manchester, in the County of Lancaster, Commission Agent, for an invention for—"Certain improvements in machinery or apparatus for cutting hay, straw or other similar agricultural produce."—*A communication to him from abroad by Heinrich Pollack, of Hamburg.* *Provisional protection only.*

TWELVETREES.
7th September 1863.

2200. HARPER TWELVETREES, of Bromley, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in portable mangling and wringing apparatus." *Provisional protection only.*

NEWTON.
7th September 1863.

2201. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for directing motion in right lines."—*A communication to him from abroad by Andrew Buchanan, of Jersey, and William Alexander Righter, of Newark, both in the State of New Jersey, United States of America.* *Letters Patent sealed.*

GERISH.
WESTON.
7th September 1863.

2202. SAMUEL GERISH, of No. 60, Shoe Lane, Holborn, and JOHN WESTON, of No. 80, Whitecross Street, St. Luke's, both in the County of Middlesex, for an invention for—"Improvements in machinery for morticing, drilling, dovetailing and cutting wood, and in tools to be used for morticing." *Letters Patent sealed.*

MOND.
8th September 1863.

2203. LUDWIG MOND, of Appleton, in Widness, in the County of Lancaster, Chemist, for an invention for—"Improvements in obtaining sulphur and sulphurous acid from 'alkali waste.'" *Letters Patent sealed.*

CUTLER.
8th September 1863.

2204. JOSEPH HORATIO CUTLER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved dress fastening, which said fastening is also applicable to the fastenings of bands and belts and to other like purposes." *Letters Patent sealed.*

LOTT.
8th September 1863.

2205. JOHN CROWGEY LOTT, of Clyro (near Hay), in the County of Radnor, National School Master, for an invention for—"Improved apparatus for turning over the leaves of music." *Letters Patent sealed.*

WILSON.
SMITH.
8th September 1863.

2206. WILLIAM ASHLEY WILSON, of Liverpool, in the County of Lancaster, Engineer, and JAMES SMITH, also of Liverpool, aforesaid, Baker, for an invention for—"Improvements in furnace fire grates." *Letters Patent sealed.*

BURCH.
8th September 1863.

2207. JOSEPH BURCH, of Cragg Works, near Macclesfield, in the County of Chester, Engineer and Manufacturer, for an invention for—"Improvements in printing on certain and other terry and velvet pile carpets, felted cloths and other fabrics and materials, and in the processes and apparatus connected therewith." *Letters Patent sealed.*

BAKER.
FRIEND.
8th September 1863.

2208. THOMAS HENRY BAKER, of Tunbridge, in the County of Kent, Engineer, and GEORGE FRIEND, of the same place, Engineer, for an invention for—"Improvements in treating excrementitious and sewage matters and in the means or apparatus employed therein." *Letters Patent sealed.*

BROOMAN.
8th September 1863.

2209. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machines for working and preparing skins."—*A communication to him by André Adler, a person resident at Paris, France.* *Letters Patent sealed.*

HEWITT.
8th September 1863.

2210. WILLIAM HEWITT, of the City of Bristol, Engineer, for an invention for—"An improved rudder and means of working the same." *Letters Patent sealed.*

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JACK.
8th September 1863.

2211. JAMES DEAS JACK, of Montrose, in the County of Forfar, North Britain, Engineer, for an invention for—"Improvements in moulding or shaping metals."
Letters Patent sealed.

ADAM.
8th September 1863.

2212. LOUIS ADAM, of Moscow, in the Empire of Russia, Merchant, for an invention for—"An improved machine for mowing grass or reaping grain."
Provisional protection NOT *granted.*

TUCKER.
9th September 1863.

2213. WALTER HENRY TUCKER, of 6, Southampton Street, Strand, in the County of Middlesex, Lock Manufacturer, for an invention for—"Improvements in the modes of propelling and steering vessels."
Letters Patent sealed.

LILLIE.
WHITE.
9th September 1863.

2214. JOSEPH LILLIE, Civil Engineer, and JOHN HAINES WHITE, Dentist, both of Manchester, in the County of Lancaster, for an invention for—"An improved composition or coating for the protection and preservation of surfaces of iron, wood and other materials."
Letters Patent sealed.

HAWKSWORTH.
9th September 1863.

2215. WILLIAM HIGGS HAWKSWORTH, of Oldham, in the County of Lancaster, Machinist, for an invention for—"Certain improvements in apparatus for preparing cotton and other fibrous materials for spinning."
Letters Patent sealed.

NADEN.
9th September 1863.

2216. THOMAS NADEN, the younger, of Birmingham, in the County of Warwick, Architect, for an invention for—"Improvements in raising the covers or lids of hot water jugs, tea-pots, coffee pots and other vessels."
Provisional protection only.

GLYDON.
9th September 1863.

2217. WILLIAM GLYDON, the younger, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in apparatus and machinery for the manufacture of metallic tubes and hollow cylinders, part of which improvements may also be applied to the casting of other hollow bodies."
Provisional protection only.

YORK.
9th September 1863.

2218. JOSIAS BULL YORK, of Coleshill, in the County of Warwick, Gentleman, for an invention for—"Improvements in privies or closets to be used in place of water-closets."
Provisional protection NOT *granted.*

GEDGE.
9th September 1863.

2219. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in paving roads or ways."—*A communication to him from abroad by Louis Victor Fortin, of Paris, in the Empire of France.*
Provisional protection only.

HUGHES.
9th September 1863.

2220. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the manufacture of chenille and in the machinery or apparatus employed therein."—*A communication to him from abroad by Louis Bernardin, residing at Lyons, in the Empire of France.*
Letters Patent sealed.

ROBINSON.
9th September 1863.

2221. JOHN ROBINSON, of Batley, in the County of York, Stone Mason, for an invention for—"Improvements in steam-boiler and other furnaces."
Provisional protection only.

CLARK.
9th September 1863.

2222. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the means of utilizing refuse azoted matters of commerce for the manufacture of various chemical products."—*A communication to him from abroad by Amédée Gelis, Chemist, and Lucien Dusart, Chemist, both of 29, Boulevart St. Martin, Paris.*
Letters Patent sealed.

THOMPSON.
9th September 1863.

2223. NATHAN THOMPSON, of No. 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in apparatus for stopping bottles, jars and other vessels, which improvements are also applicable for stopping the muzzles of fire-arms."
Letters Patent sealed.

BOUSFIELD.
9th September 1863.

2224. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in rollers to be used in machinery for spinning and manufacturing wool, cotton and other fibrous materials."—*A communication to him from abroad by Amos Taylor, a person resident in the United States of America.*
Provisional protection only.

HUTCHINSON.
9th September 1863.

2225. WILLIAM HUTCHINSON, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines."
Provisional protection only.

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NEWTON.
9th September 1863.

2226. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in steam-engines."—*A communication to him from abroad by Henry Waterman, of the City of New York, United States of America.*
Letters Patent sealed.

MAGGS.
9th September 1863.

2227. JACOB MAGGS, of Bartlet Street, Bath, in the County of Somerset, Decorator, for an invention for—"An improved construction of fountain pen."
Provisional protection only.

OLIVER.
MYERS.
9th September 1863.

2228. EDWARD OLIVER, Engineer, and GEORGE MYERS, Draughtsman, both of Rotherham, in the County of York, for an invention for—"Improvements in apparatus for lowering and disengaging boats from vessels." *Letters Patent sealed.*

WILSON.
10th September 1863.

2229. JOHN HAYS WILSON, of the firm of John Hays Wilson and Company, of Liverpool, in the County of Lancaster, Brass Founders and Ships' Ironmongers, for an invention for—"Improvements in side lights for ships and other navigable vessels, and in the manufacture of the same." *Letters Patent sealed.*

JORDAN.
10th September 1863.

2230. THOMAS BROWN JORDAN, of Milton Cottage, South Lambeth, in the County of Surrey, Mechanical Engineer, for an invention for—"Improvements in granulating and drying gunpowder and in apparatus to be used therefor."
Provisional protection only.

GREENER.
10th September 1863.

2231. WILLIAM WELLINGTON GREENER, of Birminghim, in the County of Warwick, Gun Maker, for an invention for—"Improvements in breech loading firearms." *Letters Patent sealed.*

WRIGHT.
WRIGHT.
CLOUGH.
10th September 1863.

2232. HOLMES WRIGHT, and JOHN WILLIAM WRIGHT, of Freedom Mills, Morton, near Bingley, in the County of York, Paper Manufacturers, and WILLIAM CLOUGH, of Keighley, in the said County, Engineer, for an invention for—"Improvements in glazing and rolling press papers, pasteboard and other paper requiring to be glazed or rolled, and in the means or apparatus employed therein."
Letters Patent sealed.

MUIR.
MCILWHAM.
10th September 1863.

2233. MATTHEW ANDREW MUIR, of Glasgow, in the County of Lanark, North Britain, Machinist, and JAMES MCILWHAM, of the same place, Machinist, for an invention for—"Improvements in machinery or apparatus for winding yarns or thread." *Letters Patent sealed.*

CLARK.
10th September 1863.

2234. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the purification and disinfection of hydro-carburets and especially of oils produced by the distillation of coal, schist and boghead."—*A communication to him from abroad by Jean Eugène D'Arcet, Manufacturer, of 29, Boulevart St. Martin, Paris.*
Provisional protection only.

WHITEHEAD.
10th September 1863.

2235. JAMES HEYWOOD WHITEHEAD, of the Royal George Mills, near Manchester, Woollen Manufacturer, for an invention for—"Improvements in the manufacture of felted fabrics." *Provisional protection only.*

HARTSHORN.
REDGATE.
11th September 1863.

2236. JAMES HARTSHORN, of Nottingham, Lace Manufacturer, and WILLIAM REDGATE, of the same place, Draughtsman, for an invention for—"Improvements in the manufacture of lace and in means or apparatus employed therein."
Letters Patent sealed.

TAYLOR.
11th September 1863.

2237. WILLIAM TAYLOR, of Lawton Iron Works, Shiffnal, in the County of Salop, Ironmaster, for an invention for—"Improvements in the manufacture of iron rods and in machinery to be employed in the said manufacture." *Letters Patent sealed.*

DESENS.
11th September 1863.

2238. LOUIS DESENS, of Paris, No. 18, Rue de l'Echiquier, in the French Empire, Gentleman, for an invention for—"An improved bath or bathing machine adapted for deep water." *Letters Patent sealed.*

SLOAN.
11th September 1863.

2239. THOMAS JAMES SLOAN, of Paris, in the Empire of France, Engineer, for an invention for—"Certain improvements in braiding machines."
Letters Patent sealed.

RHODES.
11th September 1863.

2240. JOSEPH RHODES, of Morley, near Leeds, in the County of York, Machine Maker, for an invention for—"An improvement in piecing machines."
Letters Patent sealed.

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MEYER. 11th September 1863.

2241. LOUIS MEYER, of No. 36, Rue de Marseille, in the City of Paris, in the Empire of France, Glass Maker, for an invention for—"Improved means of and apparatus for employing vapours, gases and the heat derived from combustible matters." *Provisional protection only.*

DOBBIE. 11th September 1863.

2242. JAMES DOBBIE, of Saint Petersburg, in the Empire of Russia, Civil Engineer, for an invention for—"Improvements in the construction of railway and other carriages." *Letters Patent sealed.*

LEE. CRABTREE. 11th September 1863.

2243. JAMES DENBY LEE, and JAMES CRABTREE, of Shipley, near Bradford in the County of York, Machine Makers, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

CHRICHLEY. 11th September 1863.

2244. HENRY CHRICHLEY, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in stove grates and kitchen ranges." *Letters Patent sealed.*

GERSTENHÖFER. 11th September 1863.

2245. MORITZ GERSTENHÖFER, of Freiberg, in the Kingdom of Saxony, for an invention for—"An improved construction of furnace for roasting pyrites." *Letters Patent sealed.*

CRELLIN. 12th September 1863.

2246. JAMES CRELLIN, of Lime Street, Liverpool, in the County of Lancaster, Plumber and Brass Founder, for an invention for—"Improvements in apparatus for governing and stopping the flow or passage of fluids." *Letters Patent sealed.*

KING. 12th September 1863.

2247. JAMES KING, of Glasgow, in the County of Lanark, North Britain, Chemist, for an invention for—"Improved means for assisting and regulating the process of fermentation." *Letters Patent sealed.*

WALLIS. 12th September 1863.

2248. CHARLES EDWIN WALLIS, of Millman Street, Bedford Row, Holborn, in the County of Middlesex, for an invention for—"Improvements in revolving fire-arms." *Provisional protection only.*

GREGORY. 12th September 1863.

2249. EBENEZER NOAH GREGORY, of Camberwell, in the County of Surrey, Wire Cloth Manufacturer, for an invention for—"An improved method of uniting belts and lengths of wire gauze and other metal cloth." *Provisional protection only.*

CLARK. 12th September 1863.

2250. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in revolving fire-arms."—*A communication to him from abroad by Thomas Jefferson Vail, of Hartford, County of Hartford, and State of Connecticut, United States of America.* *Letters Patent sealed.*

SUTHERLAND. 12th September 1863.

2251. DOUGLAS SYMONDS SUTHERLAND, of No. 34, Great George Street, Westminster, Civil Engineer, for an invention for—"Improvements in blasting rocks and other materials." *Letters Patent sealed*

WHIPPLE. 12th September 1863.

2252. JOHN ADAMS WHIPPLE, of Boston, in the State of Massachusetts, and United States of America, for an invention for—"Improvements in apparatus for supporting photograph cameras." *Letters Patent sealed.*

RIVIERE. 14th September 1863.

2253. HENRY RIVIERE, of 19, Queen's Road, Bayswater, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in the construction and application of apparatus and implements used for the purpose of heating, cooling and evaporating." *Letters Patent sealed.*

HUTTON. 14th September 1863.

2254. WILLIAM ROSS HUTTON, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"An improved lubricating compound." *Provisional protection only.*

BELL. 14th September 1863.

2255. THOMAS BELL, of Wishaw, in the County of Lanark, North Britain, Manager, for an invention for—"Improvements in apparatus for distilling shale or other bituminous minerals." *Provisional protection only.*

GEDGE. 14th September 1863.

2256. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in safety lamps for mines."—*A communication to him from abroad by François Chapuis and Léonce Decombette, both of the Rue du Faubourg Saint Martin, Paris, France.* *Provisional protection only.*

MILLIN. 14th September 1863.

2257. GEORGE FRANCIS MILLIN, of the City of Oxford, for an invention for—"Improved arrangements for facilitating the quick detachment of horses or draught animals from carriages or vehicles and for the application of break power, with the view to prevent accidents." *Provisional protection only.*

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BILLINGS. 14th September 1863.

2258. GEORGE WHITFIELD BILLINGS, of the City and State of New York, United States of America, for an invention for—"An improved method of preparing the fibres of hemp, flax and other vegetable materials for manufacturing purposes." *Letters Patent sealed.*

GOSSAGE. 14th September 1863.

2259. WILLIAM GOSSAGE, of Widnes, in the County of Lancaster, Chemist, for an invention for—"Improvements in drying or curing certain vegetable productions." *Provisional protection only.*

BATTCOCK. 15th September 1863.

2260. CHARLES BATTCOCK, of Wandsworth, in the County of Surrey, Fusee and Match Maker, for an invention for—"Improvements in cigar lighters and fusee matches, part of said improvements being applicable also to vestas and matches, wax tapers and candles." *Letters Patent sealed.*

HOWELL. 15th September 1863.

2261. GEORGE HOWELL, of Old Kent Road, in the County of Surrey, Stationer, for an invention for—"Improvements in machinery for stamping or obliterating and printing, especially applicable to post office purposes, parts of which improvements are applicable to machines in which cams are employed." *Letters Patent sealed.*

THOMPSON. 15th September 1863.

2262. WARREN THOMPSON, of No. 5, Rue Neuve des Martyres, Paris, in the Empire of France, for an invention for—"Improvements in electric telegraph apparatus." *Letters Patent sealed.*

BARCLAY. 15th September 1863.

2263. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, Engineer, for an invention for—"Improvements in locomotive or other steam-engines." *Provisional protection only.*

FOX. 16th September 1863.

2264. JOSEPH FOX, of the firm of Fox, Brothers, Engineers, Derby, in the County of Derby, for an invention for—"Improvements in machinery for planing or cutting off the sides of armour plates." *Letters Patent sealed.*

FLEMING. 16th September 1863.

2265. ANDREW FLEMING, of Glasgow, in the County of Lanark, North Britain, Mat Maker, for an invention for—"Improvements in cutting or finishing matting and similar fabrics, and in the machinery used therefor." *Provisional protection only.*

LEWAL. 16th September 1863.

2266. GABRIEL LEWAL, of 5 and 6, Philpot Lane, E.C., London, Engineer, for an invention for—"An improved method of and apparatus for consuming smoke and heating and warming public and other buildings, and for drying purposes generally." *Letters Patent sealed.*

COX. 16th September 1863.

2267. JOHN COX, of Gorgie Mills, in the County of Edinburgh, Glue Maker, for an invention for—"Improvements in swings." *Letters Patent sealed.*

RAHILL. 16th September 1863.

2268. JAMES RAHILL, of the Minories, in the City of London, Mariner, for an invention for—"Improvements in liquid compasses." *Letters Patent sealed.*

WATSON. 16th September 1863.

2269. ALFRED WATSON, of King Street, in the City of London, Engineer, for an invention for—"An improvement in hinges." *Letters Patent sealed.*

DANNATT. 16th September 1863.

2270. JAMES DANNATT, of Sunderland, in the County of Durham, Plumber, for an invention for—"Improvements in the construction of apparatus for cooling liquids." *Provisional protection only.*

LATCHFORD. 16th September 1863.

2271. BENJAMIN LATCHFORD, of Upper Saint Martin's Lane, in the County of Middlesex, Bit and Spur Maker, for an invention for—"An improved spur." *Letters Patent sealed.*

WEBBER. 16th September 1863.

2272. BERNARD JAMES WEBBER, of Newton Abbot, in the County of Devon, for an invention for—"Improvements in threshing machines." *Letters Patent sealed.*

THOMSON. 16th September 1863.

2273. ROBERT THOMSON, of Manchester, in the County of Lancaster, Silk Manufacturer, for an invention for—"An improved mixed fabric and in the application thereof to covering umbrellas and parasols." *Provisional protection only.*

SCOTT. STARKEY. 16th September 1863.

2274. EDWARD SCOTT, of the City of Manchester, in the County of Lancaster, Engineer, and JOHN STARKEY, of Salford, in the same County, Overlooker, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

HARRINGTON. 16th September 1863.

2275. ROBERT HARRINGTON, of Birmingham, in the County of Warwick, Umbrella Furniture Manufacturer, for an invention for—"Improvements in umbrellas and parasols and in parts thereof." *Provisional protection only.*

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TATE.
16th September 1863.

2276. JOHN MACLEAN TATE, of Bermondsey Wall, Bermondsey, in the County of Surrey, for an invention for—"An improved method of hanging the lower topsail yards of ships and other sailing vessels." *Letters Patent sealed.*

McEWEN.
17th September 1863.

2277. JAMES McEWEN, of Lay's Foundry, near Brierley Hill, in the County of Stafford, Iron Founder and Coke Manufacturer, for an invention for—"A new or improved combined coke oven and hot blast oven or apparatus." *Letters Patent sealed.*

MERCIER.
17th September 1863.

2278. ZACHARIE JOSEPH MERCIER, of No. 50, Rue de Longchamp Chaillot, in the City of Paris, France, Mechanician, for an invention for—"An improved gas cock of elastic and continuous pressure." *Provisional protection only.*

GEDGE.
17th September 1863.

2279. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved instruments for ascertaining levels, also for computing angles."—*A communication to him from abroad by Jean Baptiste Chairgrasse, of Dijon, France.* *Provisional protection only.*

EDWARDS.
LIVESEY.
17th September 1863.

2280. JOHN EDWARDS, of 23, Basinghall Street, and JAMES LIVESEY, of 75, Cannon Street West, in the City of London, for an invention for—"Improvements in the permanent way of railways." *Provisional protection* NOT *granted.*

CHAPLIN.
17th September 1863.

2281. ALEXANDER CHAPLIN, of No. 24, Cheyne Walk, Chelsea, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for propelling ships or vessels." *Letters Patent sealed.*

COWAN.
17th September 1863.

2282. PHINEAS COWAN, of the firm of L. Cowan and Sons, of Barnes, in the County of Surrey, Manufacturers, for an invention for—"An improvement in refining sugar." *Letters Patent sealed.*

WYLDÉ.
17th September 1863.

2283. FÉDOR DE WYLDÉ, of Trinity Square, Tower Hill, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of an hydrated silica." *Letters Patent sealed; specification filed by order.*

BROOMAN.
17th September 1863.

2284. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in taps."—*A communication to him from abroad by Jean Louis De Waroquier, of Paris, France.* *Provisional protection only.*

ULRICH.
17th September 1863

2285. JOHN GOTTLIEB ULRICH, of No. 47, Wellclose Square, in the County of Middlesex, Chronometer Maker, for an invention for—"Improvements in apparatus applied to railway carriages and trains in order to obtain greater safety to passengers." *Letters Patent sealed.*

JOHNSON.
17th September 1863.

2286. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in life belts and swimming belts."—*A communication to him from abroad by Torrilhon Verdier and Company, of Paris, in the Empire of France, Manufacturers.* *Letters Patent sealed.*

McLAURIN.
17th September 1863.

2287. PETER McLAURIN, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in drying paper, pasteboard and similar fabrics, and in the machinery, apparatus or means employed therein." *Letters Patent sealed.*

CHADBURN.
TRISTRAM.
17th September 1863.

2288. CHARLES HENRY CHADBURN, of 71, Lord Street, and WILLIAM JOHN TRISTRAM, of 34, Adlington Street, both in Liverpool, in the County of Lancaster, for an invention for—"Improvements in the construction of ships and other vessels and in the machinery for propelling them." *Provisional protection only.*

WHITEHEAD.
17th September 1863.

2289. JAMES WHITEHEAD, of Calverley, near Leeds, in the County of York, Mechanic, for an invention for—"Improvements in pneumatic motive-power machinery." *Provisional protection only.*

ALLEN.
18th September 1863.

2290. JAMES ALLEN, of the City of Manchester, Engineer and Brass Founder, for an invention for—"Improvements in the construction of valves and cocks for steam, water, gas and other fluids." *Letters Patent sealed.*

ROBERTS.
NAYLOR.
18th September 1863.

2291. JOHN ROBERTS, of the City of Manchester, in the County of Lancaster Organ Builder, and ROBERT NAYLOR, of the same place, Gentleman, for an invention for—"Improvements in increasing, diminishing or otherwise regulating the power and tone of organs, harmoniums, pianofortes or other instruments with similar keys or key boards." *Letters Patent sealed.*

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DWYER. 18th September 1863.

2222. ROBERT DOYNE DWYER, of Warrington, in the County of Lancaster, Engineer, for an invention for—"Improved apparatus for cleaning and painting or coating the bottoms of ships and other structures." *Letters Patent sealed.*

DAVIES. 18th September 1863.

2223. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of iron and steel, and in apparatus to be employed in such manufacture."—*A communication to him from abroad by William Gerhardt, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

LORBERG. 18th September 1863.

2224. WILLIAM LORBERG, of Wyld's Rents, Bermondsey, in the County of Surrey, Analytical Chemist, for an invention for—"Improvements in the treatment of rags and obtaining valuable chemical products from the animal fibre therein." *Letters Patent sealed.*

BAGGS. 18th September 1863.

2225. ISHAM BAGGS, of Cambridge Terrace, in the County of Middlesex, Electrician, for an invention for—"Improvements in the means of protecting and preserving the hulls and bottoms of ships and vessels from fouling and corrosion." *Letters Patent sealed.*

NOIROT. 18th September 1863.

2226. ALFRED NOIROT, of No. 61, Rue Pigale, in the City of Paris, France, for an invention for—"New tiles." *Provisional protection only.*

COOK. 18th September 1863.

2227. JOHN MASON COOK, of Leicester, in the County of Leicester, Hay and Corn Factor, for an invention for—"Improvements in railway carriages and all other springed vehicles." *Letters Patent sealed.*

BROOMAN. 18th September 1863.

2228. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved thread for fishing-nets." *A communication to him from abroad by David Alexandre Aguitton, of Paris, France.* *Provisional protection only.*

HART. 18th September 1863.

2229. HERBERT WILLIAM HART, of Fleet Street, in the City of London, Manufacturer, for an invention for—"An improvement in T fastenings." *Letters Patent sealed.*

HUSKINSON. 18th September 1863.

2230. HENRY CHARLES HUSKINSON, of Manchester, in the County of Lancaster, for an invention for—"Improvements in the manufacture of buttons." *Letters Patent sealed.*

NEWTON. 18th September 1863.

2231. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in propelling vessels and in apparatus relating thereto."—*A communication to him from abroad by Jean Pierre Serre, junior, of Rue St. Sebastien, Paris, in the Empire of France.* *Provisional protection only.*

SMITH. 18th September 1863.

2232. WILLIAM SMITH, of No. 19, Salisbury Street, Strand, Civil Engineer, for an invention for—"Improvements in constructing breech-loading ordnance."—*A communication to him from abroad by John Gregory, of Barreiro, in the Kingdom of Portugal.* *Provisional protection only.*

SMITH. 18th September 1863.

2233. WILLIAM SMITH, of No. 19, Salisbury Street, Strand, Civil Engineer, for an invention for—"Improvements in the construction and mode of working ordnance for ships and forts, and in the means of protecting those engaged in working guns employed for such purposes."—*A communication to him from abroad by John Gregory, of Barreiro, in the Kingdom of Portugal.* *Letters Patent sealed.*

SMALL. 18th September 1863.

2234. THOMAS SMALL, of Bargate, Boston, Lincolnshire, for an invention for—"Improvements in motive-power machinery." *Provisional protection only.*

HOUGHTON. 18th September 1863.

2235. VASCONCELLOS HOUGHTON, of Grove House West, Reading, for an invention for—"Improvements in lamps and lamp wicks."—*The result partly of a communication from abroad made to him by David Eldon Hall, a person resident at Brooklyn, New York, in the United States of America, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

CHEZAUD. CHRISTEN. 19th September 1863.

2236. LOUIS FRANÇOIS CHEZAUD, of No. 3, Rue des Capucins St. Jacques, and HENRY JEREMIE CHRISTEN, of No. 6, Rue Neuve d'Orleans, in the City of Paris, in the Empire of France, for an invention for—"Improvements in printing postage stamps, banker's bills, shares and other similar documents, and in machinery employed therein." *Letters Patent sealed.*

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BUCKLEY.
19th September 1863.

2307. JOHN BUCKLEY, of Lees, in the County of York, Manager, for an invention for—"Certain improvements in mules for spinning cotton and other fibrous substances."
Provisional protection only.

FRASER.
19th September 1863.

2308. JAMES FRASER, of No. 12, South Terrace, Grosvenor Park, Camberwell, in the County of Surrey, for an invention for—"An improved method of constructing magazines for the safer and more economical storing of volatile oils in localities where the ground and labor are expensive."—*A communication to him from abroad by Moritz Pinner, of Union Square, New York, in the United States of America.*
Provisional protection only.

COUCHMAN.
19th September 1863.

2309. RICHARD COUCHMAN, of Noble Street, St. Martin's-le-Grand, in the City of London, Manufacturer, for an invention for—"Improvements in articles or instruments for supporting, holding or carrying parasols, bags, watches, ornaments or other articles or appendages."
Letters Patent sealed; specification filed by order.

FLEISCHMANN.
19th September 1863.

2310. CHARLES LOUIS FLEISCHMANN, of 18, Rue Moncey, Paris, at present residing at the Queen's Hotel, St. Martin's-le-Grand, in the City of London, for an invention for—"Improvements in machinery or apparatus for ginning cotton, also for cleaning, opening and preparing cotton, wool or other fibrous substances."
Provisional protection only.

DAVIS.
BOWLER.
19th September 1863.

2311. BENJAMIN DAVIS, of Brettle Lane, in the County of Stafford, Millwright, and WILLIAM BOWLER, of Wall Heath, in the County of Stafford, Ironfounder, for an invention for—"An improved mode of strengthening tilt hammers."
Provisional protection only.

POOLEY.
19th September 1863.

2312. JOHN CARPENTER POOLEY, of George Street, Bath, in the County of Somerset, Chemist, for an invention for—"Improvements in brewing or preparing beverages from malt and hops."
Provisional protection only.

LE PATUREL.
19th September 1863.

2313. JOHN PAUL BAUGH LE PATUREL, of Piette House, Guernsey, for an invention for—"Improvements in breech loading fire-arms."
Provisional protection only.

DE ANGELIS.
19th September 1863.

2314. IGNAZIO DE ANGELIS, of Naples, in the Kingdom of Italy, Captain in the Army, at present residing at 54, Greek Street, Soho, in the County of Middlesex, for an invention for—"An improved apparatus for obtaining motive-power."—*A communication to him from abroad by the inventor, Frederico Salomone, of Chieti, in Abruzzi, in the Kingdom of Italy.*
Letters Patent sealed.

RICHARDSON.
LUNDY.
IRVINE.
19th September 1863.

2315. THOMAS RICHARDSON, of the Town and County of Newcastle-upon-Tyne, Chemist, JOHN JAMES LUNDY, of Leith, in the County of Mid Lothian, North Britain, Colour Manufacturer, and ROBERT IRVINE, of Magdalen Chemical Works, in the said County of Mid Lothian, Manufacturing Chemist, for an invention for—"Improvements in the extraction or manufacture of oils from vegetable substances."
Letters Patent sealed.

BATEMAN.
19th September 1863.

2316. HYDE BATEMAN, of Castlenau, Barnes, in the County of Surrey, Surveyor, for an invention for—"An improved construction of rotary engine."
Provisional protection only.

VICKERS.
19th September 1863.

2317. THOMAS EDWARD VICKERS, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"An improvement in the manufacture of cast steel tyres."—*A communication to him from abroad by Jacob Mayer, of Bochum, in the Kingdom of Prussia.*
Letters Patent sealed.

FARMER.
HADFIELD.
19th September 1863.

2318. JAMES FARMER, of Salford, in the County of Lancaster, Engineer, and CHARLES HADFIELD, of Hadfield, in the County of Derby, for an invention for—"Improvements in machinery or apparatus for making bricks, tiles or slabs and other such articles."
Letters Patent sealed.

RATTIER.
21st September 1863.

2319. EDMOND FRANÇOIS RATTIER, of 82, Boulevard Sebastopol, Paris, in the Empire of France, for an invention for—"Improvements in crinolines."
Provisional protection only.

ELSDON.
21st September 1863.

2320. WILLIAM ELSDON, of Sandridge, in the County of Bourke, in the Colony of Victoria, Engineer, for an invention for—"The construction of rail and road carriages and improved wheel tires, and an improvement in railway crossings adapting them to such carriages."
Complete specification; Letters Patent sealed.

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ROBINS.
21st September 1863.

2321. WILLIAM BURNET ROBINS, of Harborne, in the County of Stafford, Actuary, for an invention for—"Improvements in portable fire and garden engines." *Letters Patent sealed.*

DOWNES.
21st September 1863.

2322. ANNE ABBEY DOWNES, of Stonnall, in the County of Stafford, Spinster, for an invention for—"Improvements in artificial teeth." *Letters Patent sealed.*

ALCAN.
21st September 1863.

2323. EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"Improvements in shears for cutting metal threads, wires and rods, applicable also for gauging wires."—*A communication to him from abroad by Leon Gauchez, of Brussels, Belgium.* *Letters Patent sealed.*

ALCAN.
21st September 1863.

2324. EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"Improvements in condensers applicable to wool carding-engines."—*A communication to him from abroad by Leon Gauchez, of Brussels, Belgium.* *Provisional protection only.*

CHÂTEL.
21st September 1863.

2325. FRANÇOIS ALFRED CHÂTEL, of 29, Boulevart St. Martin, Paris, Manufacturer, for an invention for—"Improvements in burners for burning all mineral oils."—*The result partly of a communication made to him by Mr. François Maurel, Manufacturer, a person residing in Paris, 29, Boulevart St. Martin, and partly an invention and discovery made by himself.* *Letters Patent sealed.*

WALLIS.
21st September 1863.

2326. RICHARD WALLIS, of Basingstoke, in the County of Hants, Corn and Coal Merchant, for an invention for—"Improvements in apparatus for loading and unloading vessels, and raising, lowering and otherwise conveying sacks, casks, agricultural produce and other objects, from one locality to another." *Letters Patent sealed.*

RIDLEY.
JONES.
21st September 1863.

2327. ROBERT RIDLEY, of Leeds, in the County of York, and JAMES GRAFTON JONES, of Cumming Street, Pentonville, in the County of Middlesex, for an invention for—"Improvements in apparatus for giving a reciprocating motion to picks and cutting tools used in getting coal and other minerals and stone." *Letters Patent sealed.*

BOUSFIELD.
21st September 1863.

2328. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in power looms for weaving hair cloth and fabrics in which the weft is inserted in separate lengths of material."—*A communication to him from abroad by Charles Bradley, a person resident at Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

BURGESS.
21st September 1863.

2329. CHARLES THOMAS BURGESS, of No. 3, Upper Gower Street, in the County of Middlesex, for an invention for —"Improvements in reaping machines." *Letters Patent sealed.*

HUTCHINSON.
21st September 1863.

2330. HIRAM HUTCHINSON, of No. 26, Rue Notre Dame des Victoires, Paris, Manufacturer of India-rubber, for an invention for—"Improvements in machinery for manufacturing moulded articles of india-rubber."—*A communication to him from abroad by John Green, a person resident at New York, in the United States of America.* *Letters Patent sealed.*

DAFT.
21st September 1863.

2331. THOMAS BARNABAS DAFT, of Harlesden, in the County of Middlesex, for an invention for—"Improvements in the construction of iron ships and vessels, and in sheathing the same." *Letters Patent sealed.*

VON KANIG.
21st September 1863.

2332. WILHELM ADOLF VON KANIG, of Bedford Place, Russell Square, in the County of Middlesex, for an invention for—"Improvements in railway telegraphs and signals, and also in the permanent way and carriages, for preventing railway accidents." *Provisional protection only.*

RENSHAW.
HAWORTH.
22nd September 1863.

2333. JOSEPH RENSHAW, and JOHN HAWORTH, both of the City of Manchester, Machinists, for an invention for—"Improvements in machinery for stretching woven fabrics." *Letters Patent sealed.*

DE BAYELT.
VIGOULÉTE.
22nd September 1863.

2334. GUSTAVE MAILLARD DE BAYELT, of 16, Stamford Street, in the County of Surrey, Gentleman, and JOSEPH EMILE VIGOULÉTE, of 22, Pitt Street, Fitzroy Square, in the County of Middlesex, Analytical Chemist, for an invention for—"An improved method of compounding by agglomeration artificial fuel." *Letters Patent sealed.*

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EFFERTZ.
22nd September 1863.

2335. PETER EFFERTZ, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for making bricks, tiles, pipes and other similar articles." *Provisional protection only.*

MAITLAND.
22nd September 1863.

2336. CHARLES MAITLAND, of Alloa, in the County of Clackmannan, North Britain, Brewer, for an invention for—"Improvements in mashing apparatus." *Letters Patent sealed.*

BOND.
BOND.
22nd September 1863.

2337. JOHN BOND, and JAMES BOND, Machinists, of the firm of Bond, Brothers, Longridge, near Preston, in the County of Lancaster, for an invention for—"Improvements in brick and tile making machinery, applicable also to machinery for manufacturing other articles from plastic materials." *Letters Patent sealed.*

BROOMAN.
22nd September 1863.

2338. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Certain compositions for preserving cheese."—*A communication to him from abroad by Jean Neuenschwander, of Paris, France.* *Letters Patent sealed.*

BRIGHAM.
BICKERTON.
22nd September 1863.

2339. JOHN BRIGHAM, and RICHARD BICKERTON, of the Town and County of Berwick-on-Tweed, North Britain, Implement Makers, for an invention for—"Improvements in reaping or mowing machines." *Provisional protection only.*

CLEMINSON.
22nd September 1863.

2340. WILLIAM CLEMINSON, of Ashton-under-Lyne, in the County of Lancaster, Gas Fitter, for an invention for—"Improvements in the construction of pipe wrenches." *Provisional protection only.*

PLATT.
23rd September 1863.

2341. JAMES PLATT, of 33, Argyle Street, in the Parish of St. Pancras, and in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery applicable to steam and water engines (as motors), which machinery is also applicable to lift and force pumps." *Letters Patent sealed.*

DE FONTAINE-MOREAU.
23rd September 1863.

2342. PETER ARMAND LECOMTE DE FONTAINEMOREAU, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, and 4, South St., Finsbury, London, Patent Agent, for an invention for—"Certain improvements in centrifugal machines for treating saccharine substances, part of the same being applicable to other centrifugal machines."—*A communication to him from Mr. Charles Hänsel, a person resident at Paris.* *Letters Patent sealed.*

GALLOWAY.
GALLOWAY.
23rd September 1863.

2343. WILLIAM GALLOWAY, and JOHN GALLOWAY, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in lubricating journals of revolving shafts and axles, and in the apparatus employed for that purpose." *Letters Patent sealed.*

HUGHES.
23rd September 1863.

2344. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in gas condensers."—*A communication to him from abroad by John Brunt and Alexander Renaux, Engineers, of 13, Rue Gaillon, Paris, in the Empire of France.* *Provisional protection only.*

GIBB.
HOLLAND.
23rd September 1863.

2345. WALTER GIBB, of Eccles, in the County of Lancaster, Spinner and Manufacturer, and JAMES HOLLAND, of the same place, Manager, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

ELEY.
23rd September 1863.

2346. WILLIAM THOMAS ELEY, of the firm of Eley, Brothers, of Gray's Inn Road, in the County of Middlesex, for an invention for—"Improvements in the manufacture or construction of ball cartridges." *Letters Patent sealed.*

COLLINGRIDGE.
23rd September 1863.

2347. AUGUSTUS COLLINGRIDGE, of 82, Cheapside, London, for an invention for—"Improvements in the manufacture of casks and other receptacles for containing oil, petroleum and other liquids." *Letters Patent sealed.*

PHILLIPS.
23rd September 1863.

2348. JOHN PHILLIPS, of Tollington Road, Holloway, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of levels applicable to levelling, surveying, astronomical, nautical and other instruments or purposes to which levels are applicable." *Provisional protection only.*

WHITE.
24th September 1863.

2349. WILLIAM WHITE, of Great Marylebone Street, in the County of Middlesex, Architectural Decorator, for an invention for—"Improvements in means or apparatus for coating wood and other surfaces." *Provisional protection* NOT *granted.*

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RAGON.
24th September 1863.

2350. ADOLPHE ERNEST RAGON, of Caroline Street, Bedford Square, in the County of Middlesex, for an invention for—"Improved machinery or apparatus for stirring or mixing various ingredients or materials to a pasty consistence, said machinery being especially adapted to the manufacture of bread and other articles of food."—*A communication to him from abroad by Charles Constant Simonet de Changy, of Arras, in the French Empire.* *Letters Patent sealed.*

WOOFE.
24th September 1863.

2351. WILLIAM WOOFE, of the City of Gloucester, Agriculturalist, for an invention for—"Improvements in instruments for tilling the soil and in means of drawing ploughs and other implements for tilling through the land." *Letters Patent sealed.*

MARSHALL.
MARSHALL.
24th September 1863.

2352. THOMAS MARSHALL, of 12, Gate Street, Lincoln's Inn Fields, in the County of Middlesex, Commercial Clerk, and WILLIAM MARSHALL, of No. 200, Regent Street, in the same County, Gentleman, for an invention for—"Metallic instruments to be used as substitutes for bristles in sewing, stitching, closing and otherwise joining boots and shoes and other leather work." *Letters Patent sealed.*

DRONKE.
24th September 1863.

2353. ERNEST DRONKE, of Oldhall Street, in Liverpool, in the County of Lancaster, Merchant and Agent to the Huelva Mining Company, for an invention for—"An improved mode of manufacturing gunpowder suitable for war, mining and general purposes."—*A communication to him from abroad by Edward Schultze, of Potsdam, in the Kingdom of Prussia, a Captain in the Prussian Royal Artillery.* *Provisional protection only.*

HELSBY.
24th September 1863.

2354. WILLIAM GEORGE HELSBY, of Liverpool, in the County of Lancaster, Photographic Artist, for an invention for —"Improvements in mounting or setting transparent photographic pictures." *Letters Patent sealed.*

FIRTH.
24th September 1863.

2355. AMOS FIRTH, of Bradford, in the County of York, Wheelwright and Blacksmith, for an invention for—"Improvements in furnaces for heating wheel hoops, applicable also for other similar purposes." *Provisional protection only.*

WEBSTER.
24th September 1863.

2356. JAMES WEBSTER, of Lee Crescent, Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in utilizing the waste flux from galvanizing works." *Letters Patent sealed.*

STURGEON.
24th September 1863.

2357. JOHN STURGEON, of Leeds, in the County of York, Consulting Engineer, for an invention for—"Improvements in machinery for cutting and boring coal and rocks." *Letters Patent sealed.*

OXLEY.
24th September 1863.

2358. WILLIAM OXLEY, of Manchester, in the County of Lancaster, Mill Furnisher, for an invention for—"Improvements in pickers for looms." *Provisional protection only.*

NEWTON.
24th September 1863.

2359. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the manufacture of gunpowder and powder for blasting purposes."—*A communication to him from abroad by Alfred Nobel, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

BONNEVILLE.
24th September 1863.

2360. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in horse collars."—*A communication from Toussaint Landrin, Manufacturer, a person residing at Place de la Monnaie, Nantes, Loire Inferieure, in the Empire of France, aforesaid.* *Provisional protection only.*

BONNEVILLE.
24th September 1863.

2361. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for——"Improvements in joining leather."—*A communication from Toussaint Landrin, Manufacturer, a person resident at Place de la Monnaie, Nantes, Loire Inferieure, in the Empire of France, aforesaid.* *Provisional protection only.*

DE WAILLY.
25th September 1863.

2362. CLEMENCE DE WAILLY, Widow of Leon de Wailly (an Author), living at No. 1A, Florence Street, Upper Street, Islington, N., for an invention for—"An improved slipper or clog, principally intended for bath rooms." *Provisional protection only.*

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NEWTON. 25th September 1863. **2363.** ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved joint for the tubes of surface condensers."—*A communication to him from abroad by John Van Voorst Booraem, of Jersey, in the State of New Jersey, United States of America.* *Provisional protection only.*

SPENCE. 25th September 1863. **2364.** PETER SPENCE, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in the production of sulpho-cyanide of ammonium, and other sulpho-cyanides." *Provisional protection only.*

LLOYD. 25th September 1863. **2365.** EDWARD LLOYD, of Dee Valley, near Corwen, in the County of Merioneth, Engineer, for an invention for—"Improvements in rotary engines to be worked by water, steam, air and other motive-power." *Provisional protection only.*

SCHAFFHAUSER. 25th September 1863. **2366.** MATHIAS SCHAFFHAUSER, of Cernay, in the Department of the Upper Rhine, in the Empire of France, Manufacturer, for an invention for—"Improvements in the machinery for making paper tubes used in spinning manufactories." *Provisional protection only.*

SPILL. BRIGGS. SPILL. 26th September 1863. **2367.** GEORGE SPILL, THOMAS JAMES BRIGGS, and DANIEL SPILL, all of Hackney Wick, in the County of Middlesex, for an invention for—"Improvements in the manufacture of driving straps or bands and of flexible tubes or hose." *Letters Patent sealed.*

ROWLETT. 26th September 1863. **2368.** WILLIAM TERTIUS ROWLETT, of 90, Welford Road, Leicester, in the County of Leicester, Manufacturer, for an invention for—"Improvements in crinolines and hooped skirts." *Provisional protection only.*

CLARKE. 26th September 1863. **2369.** RICHARD CLARKE, of Altringham, in the County of Chester, Skirt Manufacturer, for an invention for—"A new application of material for covering crinolines and in the manufacture of the said material." *Provisional protection only.*

CLARK. 26th September 1863. **2370.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improved fabric for the production of permanent electricity applicable for wearing-apparel."—*A communication to him from abroad by Théodore Convent, Physician, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

SPENCE. 26th September 1863. **2371.** JAMES SPENCE, Engineer in Her Majesty's Dock Yard, Portsmouth, for an invention for—"An improved plastic composition applicable to the coating of metallic and other surfaces." *Letters Patent sealed.*

GLEERUP. 26th September 1863. **2372.** ABRAHAM GLEERUP, of Copenhagen, but now residing at Jewry Street, in the City of London, for an invention for—"An improved construction of gas burner."—*A communication to him from abroad by Otto Frederick Kolvig Peterson, of Copenhagen.* *Provisional protection only.*

NORRIS. 26th September 1863. **2373.** LUCIUS HENRY NORRIS, of No. 6, Upper Bedford Place, Russell Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of india-rubber and gutta-percha compounds."—*A communication to him from abroad by Lyman Hall, a person resident at No. 10, Rue Vendome, Paris, in the Empire of France.* *Letters Patent sealed.*

MALAM. TICE. 26th September 1863. **2374.** WILLIAM MALAM, of Walpole Street, Deptford, in the County of Kent, Civil Engineer, and WILLIAM TICE, of Downham Road, Islington, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in apparatus for supplying gas to railway carriages and other moving structures, and in apparatus for manufacturing and holding gas in ships and other vessels, parts of such apparatus being also applicable for manufacturing and holding gas elsewhere." *Letters Patent sealed.*

WILSON. 26th September 1863. **2375.** EDWARD BROWN WILSON, of 5, Parliament Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in furnaces and fire places applicable to the heating of steam-boilers and other purposes." *Provisional protection only.*

LOWE. 28th September 1863. **2376.** THOMAS LOWE, of Brighton, in the County of Sussex, for an invention for—"An improved break for railway and other carriages." *Letters Patent sealed.*

JEAN. 28th September 1863. **2377.** LOUIS JOSEPH JOACHIN JEAN, of Quai de l'École, No. 22, Paris, in the French Empire, Gentleman, for an invention for—"Improvements in the construction of steam-boilers and in their fire grates." *Letters Patent sealed.*

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BOURCHANI. 28th September 1863. **2378.** PIERRE BOURCHANI, of Paris, French Empire, Rue Geoffroy Marie, 14, Gentleman, for an invention for—"An improved wax light or candle stand." *Letters Patent sealed.*

CATO. 28th September 1863. **2379.** PETER CATO, of Liverpool, in the County of Lancaster, Ship Builder, for an invention for—"Improvements in the construction of combined iron and timber ships." *Letters Patent sealed.*

HARLOW. HARLOW. 28th September 1863. **2380.** JOHN TERTIUS HARLOW, of Upper Saltley, near Birmingham, in the County of Warwick, Printer, and EDMUND HARLOW, of Balsall Heath, in the County of Worcester, Gun Maker, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

GEDGE. 28th September 1863. **2381.** WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for heating by means of illuminating gas."—*A communication to him from abroad by Paulin Amédé Charpentier, of the Rue du Faubourg St. Martin, Paris, France.* *Provisional protection only.*

JOHNSON. 28th September 1863. **2382.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of boot and shoe toe pieces or tips, and in the machinery or apparatus employed therein."—*A communication to him from abroad by the American Shoe Tip Company, of New Haven, Connecticut, in the United States of America.* *Letters Patent sealed.*

BAILEY. BLAKE. BAILEY. 28th September 1863. **2383.** JOHN BAILEY, Turret Clock Manufacturer, Salford, GEORGE WILLIAM BLAKE, Agent, of Manchester, and WILLIAM HENRY BAILEY, Turret Clock Manufacturer, Salford, all of the County of Lancaster, for an invention for—"Improvements in barometers, gas regulators and other apparatuses for regulating and indicating the flow and pressure of liquids and fluids." *Letters Patent sealed.*

THOMAS. 28th September 1863. **2384.** GRIFFITH THOMAS, of No. 50, Chichester Villas, Kilburn Park, in the County of Middlesex, Builder, for an invention for—"Improvements in louvre shutters and venetian blinds." *Provisional protection only.*

PRESTON. 29th September 1863. **2385.** FRANCIS PRESTON, of the City of Manchester, Engineer, for an invention for—"Improvements in machinery for rolling and cutting files and rasps." *Letters Patent sealed.*

MULHOLLAND. 29th September 1863. **2386.** FREDERICK GEORGE MULHOLLAND, of No. 36, Essex Street, Strand, in the City of Westminster, and County of Middlesex, Civil Engineer, for an invention for—"Improvements in the mode of manufacturing submarine telegraph cables, in apparatus connected therewith, and in the method or principle of laying same, and in the preparation of the several compounds described for electric insulation and other purposes." *Letters Patent sealed.*

MENDEL. 29th September 1863. **2387.** SAM MENDEL, of the City of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in the manufacture of woven fabrics applicable to covering telegraph wires." *Letters Patent sealed.*

HAIGH. HEATON. 29th September 1863. **2388.** HENRY HAIGH, and RICHARD HEATON, of Milns Bridge, near Huddersfield, in the County of York, Dyers, for an invention for—"Improvements in dyeing cotton or other vegetable fibrous substances." *Letters Patent sealed.*

CLARK. 29th September 1863. **2389.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improvement in the soles of boots and shoes."—*A communication to him from abroad by Theodore Gustav Eiswald, of the City and County of Providence, in the State of Rhode Island, United States of America.* *Letters Patent sealed.*

GEDGE. 29th September 1863. **2390.** WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in parts of the permanent way of railways."—*A communication to him from abroad by Narcisse Antoine Brocot and Aimé Labarre, both of the Rue du Faubourg Saint Martin, Paris, France.* *Provisional protection only.*

COOPER. 29th September 1863. **2391.** JOHN COOPER, of St. Margaret's Green, Ipswich, in the County of Suffolk, Agricultural Implement Maker, for an invention for—"Improvements in the construction of harrows." *Letters Patent sealed; specification filed by order.*

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LLEWELLIN. LLEWELLIN. JAMES. 29th September 1863.

2392. PETER LLEWELLIN, JOHN LLEWELLIN, and JOHN WANKLYN JAMES, all of the City and County of Bristol, Brass Founders, for an invention for—"Improvements in water-closets." *Letters Patent sealed; specification filed by order.*

CHIDLEY. 30th September 1863.

2393. JOHN JAMES CHIDLEY, Gentleman, of Number 11, Glaskin Street, Hackney, London, for an invention for—"An improved bottle and stopper." *Letters Patent sealed.*

CLARK. 30th September 1863.

2394. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in musical instruments."—*A communication to him from abroad by Louis Etienne Dorgal, Jules François Guesné, and François Caré, all of Paris, in the Empire of France.* *Letters Patent sealed.*

SKINNER. 30th September 1863.

2395. HENRY EDWARD SKINNER, of Shadwell, in the County of Middlesex, for an invention for—"A new kind of conical packing for taps." *Provisional protection only.*

ATTREE. 30th September 1863.

2396. ELIZA SELENE ATTREE, of 37, Gibson Street, Waterloo Road, Lambeth, in the County of Surrey, for an invention for—"An improved cigar holder."—*A communication to her from abroad by Arthur Attree, of 50, Rue Fontaine St. Georges, Paris, in the Empire of France.* *Provisional protection only.*

BULLARD. 30th September 1863.

2397. EZEKIEL WILLIAMS BULLARD, of the State of Massachusetts, of the United States of America, for an invention for—"A new and useful machine or carriage for turning and spreading hay and for other useful agricultural purposes." *Complete specification; Letters Patent sealed.*

ELLIOT. 30th September 1863.

2398. GEORGE ELLIOT, of Betley Hall, in the County of Stafford, Colliery Owner, for an invention for—"Improvements in props and supports for coal and other mines." *Letters Patent sealed.*

BROWNE. 30th September 1863.

2399. BENJAMIN BROWNE, of 49, King William Street, London Bridge, in the City of London, Civil Engineer and Patent Agent, for an invention for—"An improved sight piece for rifles."—*A communication to him from abroad by William Brighton, of Auckland, New Zealand, a Lieutenant in the Auckland Rifle Volunteers.* *Letters Patent sealed.*

SMITH. 1st October 1863.

2400. WILLIAM SMITH, of No. 4, South Street, Finsbury, London, Civil Engineer, for an invention for—"An improved process for recrystallizing sugar." *Provisional protection only.*

MACKAY. 1st October 1863.

2401. JAMES MACKAY, of Aigburth, in the County of Lancaster, for an invention for—"Certain improvements in fire arms, ordnance and projectiles." *Complete specification; Letters Patent sealed.*

BELL. 1st October 1863.

2402. THOMAS BELL, of Wishaw, in the County of Lanark, North Britain, Manager, for an invention for—"A new mode of manufacturing bricks and tiles." *Provisional protection only.*

BONNEVILLE. 1st October 1863.

2403. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in railway and other breaks."—*A communication from Isidore Alexandre Moineau, Engineer Mechanician, a person resident at 19, Rue de Grenelle, Paris, in the Empire of France, aforesaid.* *Provisional protection only.*

LEGRAS. 1st October 1863.

2404. LOUIS NAPOLEON LEGRAS, of Rathbone Place, Oxford Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in cooking stoves and apparatus." *Provisional protection only.*

REID. 1st October 1863.

2405. FRANCIS REID, of Liverpool, in the County of Lancaster, Produce Broker, for an invention for—"Collecting and saving the spirit or alcohol generated by spontaneous fermentation in raw sugar, concrete melado and molasses, and thrown off during the process of boiling or refining." *Letters Patent sealed.*

BELL. 1st October 1863.

2406. JAMES BELL, of Linton, in the County of Cambridge, Civil Engineer, for an invention for—"Improvements in couplings for railway carriages." *Provisional protection only.*

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NEWTON. 1st October 1863.

2407. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for cleaning rice and other grain."—*A communication to him from abroad by Amosa Howe, of New York City, United States of America.* *Letters Patent sealed.*

DICKEY. 1st October 1863.

2408. GEORGE DICKEY, of Southwark, in the County of Surrey, Cabinet Maker, for an invention for—"Improvements in winkers or eye screening apparatus for horses and other animals." *Letters Patent sealed.*

LESLIE. 1st October 1863.

2409. PERCY LESLIE, M.D., M.R.C.S. Ed., of No. 8, Windsor Terrace, Eastbourne, in the County of Sussex, for an invention for—"Improvements in preserving the bottoms of ships or vessels and other surfaces from the prejudicial effects of marine animals and vegetable." *Letters Patent sealed.*

HORSLEY. 1st October 1863.

2410. THOMAS HORSLEY, of No. 10, Coney Street, York, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

ANDERTON. 1st October 1863.

2411. JAMES JOHN ANDERTON, of Saint James Street, Northampton, in the County of Northamptonshire, Currier, for an invention for—"Improvements in the manufacture of boots and shoes." *Provisional protection* NOT *granted.*

FARRAR. 2nd October 1863.

2412. JAMES FARRAR, of Halifax, in the County of York, Machinist, for an invention for—"Improvements in machinery or apparatus for spinning and doubling wool, alpaca, mohair, cotton, silk, flax and other fibrous substances." *Provisional protection only.*

LÜDEKE. FISCHER. 2nd October 1863.

2413. JOHANN ERNST FRIEDRICH LÜDEKE, of No. 2, Stonefield Street, Islington, in the County of Middlesex, and MAURICE FISCHER, of No. 28, Rue Taitbout, Paris, for an invention for—"Improvements in obtaining motive-power." *Provisional protection only.*

CHARLTON. 2nd October 1863.

2414. ROBERT CHARLTON, of Keighley, in the County of York, Ironfounder, for an invention for—"Certain improvements in metallic bedsteads." *Provisional protection* NOT *granted.*

TEES. 2nd October 1863.

2415. JAMES TEES, of Glasgow, in the County of Lanark, North Britain, Packing Manufacturer, for an invention for—"Improvements in packing for stuffing boxes and pistons." *Provisional protection only.*

TONGUE. 2nd October 1863.

2416. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Holborn, in the County of Middlesex, Patent Agents and Engineers, for an invention for—"An improved compound reactive agent and universal mordant to be employed in the processes of dyeing and printing."—*A communication to him from abroad by Antonio Bozzi, of Lecco, in the Province of Como, in the Kingdom of Italy.* *Provisional protection only.*

GEDGE. 2nd October 1863.

2417. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved penholder and feeder."—*A communication to him from abroad by Jean Marie Laurent, of the Rue du Faubourg Saint Martin, Paris, France.* *Provisional protection only.*

LUNDY. IRVINE. 2nd October 1863.

2418. JOHN JAMES LUNDY, of Leith, in the County of Mid-Lothian, North Britain, Colour and Chemical Manufacturer, F.G.S., and ROBERT IRVINE, of Magdalen Chemical Works, Musselburg, in the County of Mid-Lothian, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of paper." *Provisional protection only.*

TORREY. 2nd October 1863.

2419. WILLIAM AUGUSTUS TORREY, of 65, Beaver Street, New York, in the United States of America, at present residing at 17, Water Street, Liverpool, in the County of Lancaster, for an invention for—"Improvements in lubricating the axles of railway carriages."—*A communication to him from abroad by Joseph Wood, a person residing at Red Bank, New Jersey, in the United States of America.* *Provisional protection only.*

BOUSFIELD. 2nd October 1863.

2420. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in revolver fire-arms."—*A communication to him from abroad by Stephen Wood, a person resident at Cornwall, New York, United States of America.* *Provisional protection only.*

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SHEPHERD.
SHEPHERD.
2nd October 1863.

2421. GEORGE SHEPHERD, and WILLIAM THOMAS SHEPHERD, of Great Grimsby, in the County of Lincoln, trading under the firm of Shepherd and Son, for an invention for—"Improvements in restoring the crystals of lump or refined sugar which has been divided by saws, and in apparatus employed for this purpose." *Provisional protection only.*

BOWRON.
ROBINSON.
2nd October 1863.

2422. JAMES BOWRON, of South Stockton, in the County of York, Glass Manufacturer, and GEORGE ROBINSON, of Welbeck Street, Cavendish Square, in the County of Middlesex, M.D., for an invention for—"Improvements in the manufacture of soda." *Provisional protection only.*

SCHOFIELD.
KIRK.
SPIVEY.
3rd October 1863.

2423. JOSEPH SCHOFIELD, and JOHN KIRK, of Rasheliffe Iron Works, Huddersfield, in the County of York, Millwrights and Machine Makers, and WILLIAM SPIVEY, of the same place, Mechanic, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

TILLING.
PARK.
3rd October 1863.

2424. GEORGE ROBERT TILLING, of Birkenhead, in the County of Chester, Millwright, and JOHN PARK, of Liverpool, in the County of Lancaster, Die and Seal Engraver, for an invention for—"An improved mode or method of filling tobacco pipes of an improved construction." *Provisional protection only.*

WILSON.
3rd October 1863.

2425. EDWARD BROWN WILSON, of 10, Strand, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of iron and other metals and in the apparatus employed therein, parts of which are applicable for other purposes where high temperatures are employed, and also for ventilation." *Letters Patent sealed.*

FAGG.
FAGG.
3rd October 1863.

2426. THOMAS FAGG, and JESSE FAGG, both of Panton Street, in the County of Middlesex, Boot Makers, for an invention for—"Improvements in the manufacture of boots and shoes." *Provisional protection only.*

PRATT.
3rd October 1863.

2427. EDMUND PRATT, of the firm of Messieurs Pratt, Hurst and Minnitt, of the Town and County of the Town of Nottingham, Lace Manufacturers, for an invention for—"Improvements in finishing woollen fabrics made on twist lace machinery." *Provisional protection only.*

BONOMI.
3rd October 1863.

2428. IGNATIUS BONOMI, of No. 36, Blandford Square, in the County of Middlesex, for an invention for—"Improvements in the construction of arches and other like structures." *Provisional protection* NOT *granted.*

HOEHL.
BRAKELL.
GÜNTHER.
5th October 1863.

2429. WILLIAM HOEHL, CHRISTOPHER BRAKELL, and WILLIAM GÜNTHER, of the North Moor Foundry Company, Oldham, in the County of Lancaster, for an invention for—"Improvements in rotary engines worked by steam, water or other motive-power." *Letters Patent sealed.*

BRAKELL.
HOEHL.
GÜNTHER.
5th October 1863.

2430. CHRISTOPHER BRAKELL, WILLIAM HOEHL, and WILLIAM GÜNTHER, of the North Moor Foundry Company, Oldham, in the County of Lancaster, for an invention for—"Improvements in motive engines worked by water, steam or other motive-power."—*Partly a communication to them from abroad by Albert Westfield, of Para Bonary, Asia Minor, and the other part is their invention.* *Provisional protection only.*

STANLEY.
STANLEY.
5th October 1863.

2431. JOHN MARTIN STANLEY, and JABEZ STANLEY, both of the Midland Works, Sheffield, in the County of York, for an invention for—"Improvements in propelling." *Letters Patent sealed.*

TOMLISON.
5th October 1863.

2432. CHARLES TOMLISON, of Grove Vale Cottage, in the Parish of Great Barr, and County of Stafford, Accountant, for an invention for—"Improvements in taps, cocks, hydrants or valves and apparatus connected therewith, for opening, closing, regulating and facilitating and otherwise controlling the passage or flow of water, air, steam, gas and other fluids and liquids." *Provisional protection only.*

GUILMETTE.
5th October 1863.

2433. JAMES WILLIAM GUILMETTE, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"An improved substitute for whiting, pipe clay and other analogous substances, to be employed to produce a white coating or surface." *Letters Patent sealed.*

BAILEY.
5th October 1863.

2434. WILLIAM HENRY BAILEY, of Keighley, in the County of York, Mechanic, for an invention for—"Improvements in machinery for combing wool and other fibrous materials."—*Partly a communication to him from abroad by Isaac Bailey, of Croix, near Lille, in the Empire of France, and partly an invention made by himself.* *Provisional protection only.*

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ELLIS.
5th October 1863.

2435. GEORGE HENRY ELLIS, of Wellington Road, Bromley, in the County of Middlesex, for an invention for—"Improvements in and application of apparatus for aiding the combustion of fuel." *Provisional protection only.*

GEORGE.
5th October 1863.

2436. BENJAMIN GEORGE GEORGE, of 47, Hatton Garden, in the County of Middlesex, Lithographer and Printer, for an invention for—"Improvements in tablets, show bills and trade announcements used for advertising and other purposes." *Letters Patent sealed.*

IVORY.
5th October 1863.

2437. THOMAS IVORY, of Edinburgh, Advocate, for an invention for—"Improvements in steam-engines and in furnaces and boilers for the same." *Letters Patent sealed.*

TOWLSON.
5th October 1863.

2438. JOHN TOWLSON, of the Parish of Heigham, in the City of Norwich, Engineer, for an invention for—"Improvements in apparatus for cooling liquids." *Letters Patent sealed.*

PEPPER.
5th October 1863.

2439. ROBERT PEPPER, of Saville Street, Sheffield, in the County of York, Brewer's Clerk, for an invention for—"An improved machine for pressing or crushing spent hops." *Letters Patent sealed.*

LEGG.
5th October 1863.

2440. WILLIAM LEGG, of Liverpool, in the County of Lancaster, Hat and Cap Manufacturer, for an invention for—"Improvements applicable to sewing-machines." *Provisional protection only.*

MATHEWS.
6th October 1863.

2441. SAMUEL MATHEWS, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

WHITEHOUSE.
6th October 1863.

2442. EDWIN WHITEHOUSE, of Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Certain improvements in the manufacture of wrought iron shackles." *Letters Patent sealed.*

HOLGATE.
HOLGATE.
HOLGATE.
6th October 1863.

2443. WILLIAM HOLGATE, HENRY HOLGATE, and THOMAS HOLGATE, of Accrington, in the County of Lancaster, for an invention for—"Improvements in the manufacture of pickers used in weaving." *Provisional protection only.*

BROOMAN.
6th October 1863.

2444. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in steam-boilers and furnaces."—*A communication to him from abroad by Johann Christian Carsten Meyn, of Rendsburg, in the Duchy of Holstein.* *Letters Patent sealed.*

BATCHELOUR.
6th October 1863.

2445. WILLIAM BATCHELOUR, of Finsbury Pavement, in the County of Middlesex, Doctor of Medicine, for an invention for—"An improved apparatus for moulding and modelling palates, teeth and gums for dental purposes." *Provisional protection only.*

DYER.
6th October 1863.

2446. GEORGE DYER, of Regent Street, in the County of Middlesex, for an invention for—"Improvements in the construction of railway carriages." *Letters Patent sealed.*

JOHNSTON.
6th October 1863.

2447. ALEXANDER JOHNSTON, of Comely Bank, near Edinburgh, in the County of Mid-Lothian, North Britain, Gentleman, for an invention for—"Improvements on railway carriages." *Letters Patent sealed.*

JONES.
7th October 1863.

2448. EDWARD JONES, of Gorton, near the City of Manchester, Engineer, for an invention for—"Improvements in apparatus to be used for pumping water out of mines and other places." *Letters Patent sealed; no specification filed.*

BARR.
7th October 1863.

2449. DAVID BARR, of Birmingham, in the County of Warwick, House and Estate Agent, for an invention for—"Improvements in apparatus for regulating and working window blinds." *Provisional protection only.*

LEAK.
7th October 1863.

2450. ELIAS LEAK, of Longton, in the County of Stafford, for an invention for—"Improved apparatus to be used in placing 'glost china' and earthenware in ovens and kilns for firing, burning or baking such ware." *Letters Patent sealed.*

CADDICK.
7th October 1863.

2451. JOSEPH CADDICK, of Birmingham, in the County of Warwick, Tool Maker, for an invention for—"Improvements in the manufacture of runners, runner notches and top notches for umbrellas and parasols." *Provisional protection only.*

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GRAHAM. 7th October 1863.

2452. GEORGE FREDERICK GRAHAM, of No. 1, Upper Gordon Street, Euston Square, in the County of Middlesex, Surveyor and Builder, for an invention for—"Improvements in high pressure cocks." *Provisional protection only.*

BUTTON. 7th October 1863.

2453. CHARLES POMEROY BUTTON, of the Patent Hydropult Office, 27, Leadenhall Street, in the City of London, Merchant, for an invention for—"Improvements in lamps especially applicable to the burning of hydrocarbons."—*A communication to him from abroad by William Painter, of Fallston, Harford County, Maryland, United States of America.* *Provisional protection only.*

BUTTON. 7th October 1863.

2454. CHARLES POMEROY BUTTON, of the Patent Hydropult Office, 27, Leadenhall Street, in the City of London, Merchant, for an invention for—"Improvements in pumps."—*A communication to him from abroad by Walter Davies Sperry, of Cleveland, United States of America.* *Provisional protection only.*

BUTTON. 7th October 1863.

2455. CHARLES POMEROY BUTTON, of the Patent Hydropult Office, 27, Leadenhall Street, in the City of London, Merchant, for an invention for—"Improvements in harrows."—*A communication to him from abroad by Walter Davies Sperry, of Cleveland, Oswego County, New York, United States of America.* *Letters Patent sealed.*

ZOX. 7th October 1863.

2456. RAPHAEL ZOX, of Nelson Square, Blackfriars Road, in the County of Surrey, Hat and Cap Manufacturer, for an invention for—"Improvements in the manufacture of academic caps." *Provisional protection only.*

RIGG. 7th October 1863.

2457. ARTHUR RIGG, junior, of George Street, Chester, for an invention for—"Improvements in apparatus for propelling vessels." *Provisional protection only.*

SLAUGHTER. 7th October 1863.

2458. EDWARD SLAUGHTER, of the Avonside Iron Works, Bristol, in the County of Somerset, Engineer, for an invention for—"Improvements in locomotive engines." *Letters Patent sealed*

GIBSON. 7th October 1863.

2459. JOHN GIBSON, of Ryhope Colliery, Sunderland, Engineer, for an invention for—"Improvements in cast iron pit tubbing." *Letters Patent sealed.*

WHIGHT. 7th October 1863.

2460. GEORGE WHIGHT, of Ipswich, in the County of Suffolk, Machinist, for an invention for—"Improvements in washing apparatus."—*A communication to him from abroad by William Bamford, a person resident at Belleville, Canada West.* *Letters Patent sealed.*

JOHNSON. 7th October 1863.

2461. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the permanent way of railways."—*A communication to him from abroad by Miguel de Bergue, of Barcelona, in the Kingdom of Spain.* *Provisional protection only.*

JOHNSON. 8th October 1863.

2462. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in propelling ships and in the apparatus employed therein."—*A communication to him from abroad by Eugene Mouline, of Paris, in the Empire of France, Engineer.* *Provisional protection only.*

CHARPENTIER. 8th October 1863.

2463. AMEDÉE PAULIN CHARPENTIER, of the Palais Royal, Paris, France, Watch Manufacturer, for an invention for—"Improvements in the manufacture of watches." *Provisional protection only.*

CROSWELL. 8th October 1863.

2464. CALEB CROSWELL, of No. 8, Salisbury Street, Strand, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Samuel Strong, a person residing at Washington City, in the United States of America.* *Letters Patent sealed.*

SMITH. 8th October 1863.

2465. MICHAEL SMITH, of Bushfield House, Donnybrook Road, in the County of the City of Dublin, Ireland, for an invention for—"Improvements in washing, cleansing, salting and packing butter and in apparatus to be used therein." *Provisional protection only.*

CANOUIL. BLANCHON. 8th October 1863.

2466. GERMAIN CANOUIL, of Paris, France, Chemist, and FRANÇOIS ARMAND BLANCHON, of Paris, France, Manufacturer of Toy Arms, for an invention for—"Shooting toy fusees, toy rockets or other similar toy missiles, by means of toy pistols or other toy fire-arms." *Provisional protection only.*

LORBERG. 8th October 1863.

2467. WILLIAM LORBERG, of No. 4, Wyld's Rents, Bermondsey, in the County of Surrey, Analytical Chemist, for an invention for—"Improvements in the manufacture of gas from tar." *Letters Patent sealed.*

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DOUGALL.
8th October 1863.

2468. JAMES DALZIEL DOUGALL, of No. 59, St. James's Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in 'camel guns' and other light artillery, which improvements are also applicable to 'punt guns' or other heavy fowling pieces or rifles." *Letters Patent sealed.*

WATSON.
KENDALL.
8th October 1863.

2469. ROBERT GREEN WATSON, Gentleman, and WILLIAM JOHN KENDALL, Mechanic, both of Preston, in the County of Lancaster, for an invention for—"An improved walking stick umbrella." *Provisional protection only.*

MEAD.
8th October 1863.

2470. JOAN MEAD, of Abridge, in the County of Essex, for an invention for—"Improvements in the construction of various articles of furniture." *Provisional protection only.*

SPENCER.
8th October 1863.

2471. JOHN SPENCER, of Doncaster, in the County of York, Implement Manufacturer, for an invention for—"Improvements in machinery for separating different sizes of root." *Letters Patent sealed.*

NEWTON.
8th October 1863.

2472. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of condensers."—*A communication to him from abroad by William Judson, of New York, United States of America.* *Letters Patent sealed.*

LEFEBVRE.
9th October 1863.

2473. LOUIS LEFEBVRE, of No. 9, Cecil Street, Strand, in the County of Middlesex, Physician, for an invention for—"Improvements in vapor bath apparatus." *Complete specification; Letters Patent sealed.*

WOOD.
WHITEHEAD.
TETLOW.
9th October 1863.

2474. JAMES WOOD, JOHN WHITEHEAD, and THOMAS TETLOW, all of Oldham, in the County of Lancaster, Engineers, for an invention for—"Certain improvements in machinery or apparatus for governing the speed of steam-engines." *Letters Patent sealed.*

ELSOM.
9th October 1863.

2475. JOSEPH ELSOM, of No. 10 & 11, Regent's Row, Dalston, in the Parish of St. Leonards, Shoreditch, in the County of Middlesex, for an invention for—"Improvements in parallel turning and in machinery for that purpose." *Letters Patent sealed.*

JAMES.
9th October 1863.

2476. ENOCH WATKIN JAMES, of Brynllys, in the County of Cardigan, Farmer, for an invention for—"Improved apparatus and arrangements for giving buoyancy to or raising sinking or submerged ships and other sinking or sunken bodies." *Provisional protection only.*

PARRY.
9th October 1863.

2477. GEORGE PARRY, of Ebbw Vale Iron Works, in the County of Monmouth, Furnace Manager, for an invention for—"Improvements in refining crude pig iron and in furnaces connected therewith." *Letters Patent sealed.*

MCINNES.
9th October 1863.

2478. JOHN MCINNES, of Liverpool, in the County of Lancaster, Manufacturer of Compositions for Protecting the Bottoms of Iron Ships, for an invention for—"Improvements in sheathing for navigable vessels of iron or wood, which sheathing is also applicable to the covering of roofs, walls and other purposes." *Letters Patent sealed.*

MATHER.
9th October 1863.

2479. JAMES MATHER, of Crow Oaks, near Radcliffe, in the County of Lancaster, Bleacher, Dyer and Finisher, for an invention for—"Improvements in friction or glazing calenders." *Provisional protection only.*

LANGE.
9th October 1863.

2480. DANIEL LANGE, of 5, Trinity Square, Tower Hill, in the City of London, for an invention for—"Certain improvements in railway wrappers." *Provisional protection only.*

FELLOWS.
9th October 1863.

2481. NOAH FELLOWS, of 123, Chancery Lane, London, in the County of Middlesex, for an invention for—"An improved method of extinguishing fires in chimneys and flues, regulating and promoting draught therein, calculated also to act as a ventilator." *Provisional protection only.*

MARTYN.
9th October 1863.

2482. RICHARD MARTYN, of the firm of Martyn, Dennis and Company, of Liverpool, in the County of Lancaster, Mineral and Metal Agents, for an invention for—"An improved method of condensing and purifying the fumes and gases arising from the treatment of metals and metallic ores and substances." *Provisional protection* NOT *granted.*

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BROOMAN. 9th October 1863.

2483. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in amalgamating and separating gold and silver from quartz and earths containing the same, and in apparatus employed therein."—*A communication to him from abroad by Henry Wright Adams and William Savage Worthington, of New York, United States of America.* *Provisional protection only.*

REYNOLDS. 10th October 1863.

2484. GEORGE WAIDE REYNOLDS, of Smethwick, in the County of Stafford, Crinoline Manufacturer, for an invention for—"An improved manufacture of bands or strips for crinolines." *Letters Patent sealed.*

VAUGHAN. 10th October 1863.

2485. JOHN VAUGHAN, of Middlesborough, in the County of York, Iron Master, for an invention for—"Improved apparatus for purifying waste gases from blast and other furnaces." *Provisional protection only.*

BANNER. 10th October 1863.

2486. SAMUEL BANNER, of Liverpool, in the County of Lancaster, General Broker, for an invention for—"An improved mode or method of storing petroleum and other like oils and spirits." *Provisional protection only.*

RUTHARDT. THIELE. 10th October 1863.

2487. JULIUS RUTHARDT, and FERDINAND THIELE, both of Oxford Market, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in apparatus for purifying and increasing the illuminating power of gas." *Provisional protection only.*

FAIRBANKS. LAVENDER. LAVENDER. 10th October 1863.

2488. WILLIAM BROOKES FAIRBANKS, JOSEPH LAVENDER, and FREDERICK LAVENDER, Saddlers, Ironmongers, Bridle Cutters, Harness Makers, and Manufacturers of Brass and Plated Harness Furniture, of Walsall, in the County of Stafford, for an invention for—"Improvements in the manufacture of hames." *Letters Patent sealed.*

PROUDFOOT. 10th October 1863.

2489. DUNCAN PROUDFOOT, of Glasgow, in the County of Lanark, North Britain, Drysalter, for an invention for—"Improvements in printing or dyeing textile fabrics." *Letters Patent sealed.*

GOUNDRY. 10th October 1863.

2490. JOHN WESLEY GOUNDRY, of Old Shildon, near Darlington, in the County of Durham, for an invention for—"Improvements in musical instruments." *Letters Patent sealed.*

HUGHES. 10th October 1863.

2491. THOMAS HUGHES, of Wolverhampton, in the County of Stafford, Tin Plate Worker, for an invention for—"Improvements in the manufacture of lanthorns." *Letters Patent sealed.*

INGLIS. 12th October 1863.

2492. ALEXANDER INGLIS, of No. 53, Arthur Road, Holloway, in the County of Middlesex, for an invention for—"Improvements in taps or cocks, part of which improvements is applicable to the lubrication and protection of the journals of revolving shafts, axles or spindles." *Provisional protection only.*

JACKSON. 12th October 1863.

2493. PETER ROTHWELL JACKSON, of the Rolling Mills, Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in the manufacture of hoops and tires for railway wheels and other purposes, and in the machinery employed therein." *Letters Patent sealed.*

HUTCHISON. 12th October 1863.

2494. WILLIAM HUTCHISON, of 21, Cardigan Street, London, for an invention for—"Improvements in the manufacture of fittings for powder flasks." *Provisional protection only.*

HARTLEY. 12th October 1863.

2495. JOHN GALLEY HARTLEY, of 11, Lawrence Pountney Lane, in the City of London, Ship Owner, for an invention for—"Improvements in the construction of iron and wooden ships and other vessels." *Provisional protection only.*

HEAP. 12th October 1863.

2496. JOHN HEAP, of London Road, Southwark, in the County of Surrey, for an invention for—"Improvements in perforating machines." *Letters Patent sealed.*

BURY. 12th October 1863.

2497. WILLIAM TARLETON BURY, of Regent Works, Sheffield, in the County of York, Steel Manufacturer, for an invention for—"An improvement in vessels or baths for containing heated metals and fluxes employed in the processes of hardening and tempering steel and steel articles." *Letters Patent sealed.*

BROWNING. 12th October 1863.

2498. THOMAS BROWNING, of Liverpool, in the County of Lancaster, for an invention for—"Improvements applicable to metallic casks and in machinery for the manufacture of the same." *Letters Patent sealed.*

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GIDLOW. 12th October 1863.

2499. THOMAS GIDLOW, of Heaton, in the County of Lancaster, Coal Proprietor, for an invention for—"Certain improvements in bearings for axles for railway or other carriages." *Provisional protection only.*

FOX. 12th October 1863.

2500. THOMAS FOX, of Ballingdon, near Sudbury, in the County of Essex, for an invention for—"Improved apparatus for cleaning out the tubes of steam-boilers, which apparatus is also applicable for cleaning out other tubes." *Letters Patent sealed.*

GEDGE. 12th October 1863.

2501. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in shears for cutting metals and other substances."—*A communication to him from abroad by Hugues François Aubert, of No. 15, Passage des Petites Ecuries, Paris, France, Edge Tool Maker.* *Letters Patent sealed.*

HUMFREY. 12th October 1863.

2502. CHARLES HUMFREY, the younger, of Saint David's Works, Saltney, in the County of Flint, for an invention for—"Improvements in the means and method of purifying hydro-carbons." *Provisional protection only.*

AITKEN. 12th October 1863.

2503. RUSSEL AITKEN, of Cambridge Street, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the permanent way of railways." *Letters Patent sealed.*

MOUNTFORD. 12th October 1863.

2504. GEORGE MOUNTFORD, of Brunswick Street, Leeds, in the County of York, Manager, for an invention for—"An improved construction of cotton gin." *Letters Patent sealed.*

ANDERTON. 12th October 1863.

2505. JAMES JOHN ANDERTON, of Saint James Street, Northampton, in the County of Northamptonshire, Currier, for an invention for—"Improvements in machinery for cutting and finishing the edges of the soles and heels and the bottoms of boots and shoes." *Letters Patent sealed.*

DODGE. 13th October 1863.

2506. JAMES DODGE, of Waterford, Saratoga County, State of New York, U.S. of America, Mechanical Engineer, at present residing in the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery for rolling, shaping or forging metals, and in apparatus for grinding and polishing the same." *Letters Patent sealed.*

MORGAN. 13th October 1863.

2507. GEORGE MORGAN, of the firm of Dalton and Morgan, Wholesale Stationers, of No. 3, Budge Row, in the City of London, for an invention for—"An improved 'sample' bag for postal and other purposes." *Letters Patent sealed.*

POYNTER. 13th October 1863.

2508. JOHN EDGAR POYNTER, of Glasgow, in the County of Lanark, North Britain, Chemical Manufacturer, for an invention for—"Improvements in throwing projectiles by means of explosive agents and in apparatus therefor." *Letters Patent sealed.*

PLACE. 13th October 1863.

2509. JOSEPH PLACE, of Hoddlesden, in the County of Lancaster, Coal Proprietor, for an invention for—"An improved application of certain schistous or shaly materials to the manufacture and finishing of paper." *Letters Patent sealed.*

ROLFE. 13th October 1863.

2510. ALFRED ROLFE, of Amwell Street, Pentonville, in the County of Middlesex, Merchant, for an invention for—"Improvements in means or apparatus for propelling carriages on railways, tramways or on common roads." *Provisional protection only.*

CRAVEN. 13th October 1863.

2511. THOMAS COWELL CRAVEN, of Greenbush, in the County of Rensellaer, and State of New York, United States of America, for an invention for—"Improvements in cotton gins." *Letters Patent sealed.*

SCOTT. 13th October 1863.

2512. THOMAS SCOTT, of 31, Nelson Square, Blackfriars Road, Southwark, Engineer, for an invention for—"Improvements in floating docks." *Letters Patent sealed; specification filed by order.*

FOWLER. 13th October 1863.

2513. JOHN FOWLER, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in apparatus used for hauling agricultural implements." *Letters Patent sealed.*

CRELLIN. 13th October 1863.

2514. ALEXANDER CRELLIN, of Dorset Place, Dorset Square, in the County of Middlesex, for an invention for—"Improvements in apparatus applicable to omnibuses in order to indicate the number of persons entering such vehicles and the distances travelled by the passengers." *Provisional protection only.*

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ROWLEY. 14th October 1863.

2515. JOHN ROWLEY, of Leeds, in the County of York, for an invention for—"Improvements in apparatus for washing, scrubbing, scouring, bleaching and discharging impurities or other matters from woven or other fibrous materials."
Letters Patent sealed; no specification filed.

INCHLEY. 14th October 1863.

2516. JOSEPH INCHLEY, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in valves for double cylinder steam-engines."
Provisional protection only.

COLQUHOUN. FERRIS. 14th October 1863.

2517. EWING PYE COLQUHOUN, and JOHN PARDOE FERRIS, both of No. 1, Lawrence Pountney Hill, in the City of London, for an invention for—"Improvements in fire bars for the furnaces of steam-boilers and the mode of mounting th same."
Letters Patent sealed.

CAVALERIE. 14th October 1863.

2518. MARCELIN FRANÇOIS DOROTHÉ CAVALERIE, of No. 10, Rue de la Fidelité, Paris, Mechanical Engineer, for an invention for—"Certain improvements in obtaining centrifugal motive-power."
Provisional protection only.

MILTON. 14th October 1863.

2519. JAMES MILTON, Manager to Messieurs John Yuill and Company, of Paisley, in the County of Renfrew, North Britain, Power Loom Manufacturers, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

RIDEOUT. 14th October 1863.

2520. WILLIAM JACKSON RIDEOUT, of Farnworth Mills, Bolton, Lancashire, Paper Manufacturer, for an invention for—"Improvements in boiling rags and other paper making materials."
Letters Patent sealed.

SONNENSTEIN. 14th October 1863.

2521. OSSIAN ESAIAS SONNENSTEIN, of the Circus, Minories, in the City of London, for an invention for—"Improvements in reflecting apparatus."—*A communication to him from abroad by Olof Johan Sodderberg, a person resident at Gothenburg, in the Kingdom of Sweden.*
Provisional protection only.

BONNEVILLE. 14th October 1863.

2522. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"An improved apparatus for cleaning ships' hulls."—*A communication from François Capponi, a person resident at Constantinople, in Turkey.*
Complete specification; Letters Patent sealed.

SMITHETT. 14th October 1863.

2523. RICHARD HUDSON SMITHETT, of King's Bench Walk, Temple, in the City of London, and of Wadham College, Oxford, Student-at-Law, for an invention for—"Improvements in the application of wheels to railway carriages."
Provisional protection only.

BEWLEY. 15th October 1863.

2524. RICHARD BEWLEY, junior, of Uttoxeter, in the County of Stafford, Iron Founder, for an invention for—"Improvements in wrenches."
Letters Patent sealed.

LESLEY. 15th October 1863.

2525. PETER LESLEY, of Philadelphia, in the United States of America, at present residing at Morley's Hotel, Strand, in the County of Middlesex, for an invention for—"Improvements in the manufacture of rails for railways."—*A communication to him from abroad by the inventor, Thomas Shoenberger Blair, of Pittsburgh, in the United States of America, aforesaid.*
Letters Patent sealed.

CLAYTON. 15th October 1863.

2526. HENRY CLAYTON, of the Atlas Works, Upper Park Place, Dorset Square, in the County of Middlesex, for an invention for—"Improvements in buildings used for drying bricks, tiles and other articles."
Letters Patent sealed.

SMITH. 15th October 1863.

2527. STEPHEN RANDOLL SMITH, of No. 7, Delamere Street, in the Parish of Paddington, for an invention for—"Improvements in apparatus for connecting chain cables and for clearing a ship's hawse when foul, and also in apparatus for acting on and presenting strain to the chain cables when ships are riding at anchor."
Letters Patent sealed.

HART. 15th October 1863.

2528. HERBERT WILLIAM HART, of Fleet Street, in the City of London, Engineer, for an invention for—"Improvements in apparatus for suspending T and other like fastenings and articles to which they are applied."
Provisional protection only.

WEATHERDON. 15th October 1863.

2529. BALDWIN FULFORD WEATHERDON, of Kingston-on-Thames, in the County of Surrey, for an invention for—"A new apparatus for rubbing off or removing the dust or dirt from boots or shoes."
Letters Patent sealed.

FLEXEN. 15th October 1863.

2530. STEPHEN FLEXEN, of 46, Skinner Street, Snow Hill, in the City of London, for an invention for—"An improved apparatus for ventilating railway and other carriages, houses, buildings, steam and sailing vessels of all kinds moveable or otherwise."
Letters Patent sealed.

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POLGLASE. COX. 16th October 1863.

2531. JAMES POLGLASE, of Bodmin, in the County of Cornwall, Mine Agent, and JONATHAN COX, of Manchester, in the County of Lancaster, Agent, for an invention for—"Improved apparatus for boring and cleaving stone."
Letters Patent sealed.

ROWING. 16th October 1863.

2532. ESAU ROWING, of Norwich, in the County of Norfolk, Engineer, for an invention for—"Improvements in steam-engines and boilers."
Provisional protection only.

BROOMAN. 16th October 1863.

2533. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in pumps to be worked by steam."—*A communication to him from abroad by Guillaume Samuel Dobbs, residing in Vienna, Austria.* *Provisional protection only*

DE MASSAS. 16th October 1863.

2534. FRANÇOIS ANTOINE EDMOND GUIRONNET DE MASSAS, of Hoxton, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in smut machines and in machines for cleansing and peeling grain and seeds."
Letters Patent sealed.

STUBER. 16th October 1863.

2535. FREDERICK GEORGE STUBER, of No. 20, Waterloo Road, in the Parish of Lambeth, County of Surrey, Teacher, for an invention for—"Improvements in lamps and stoves for the application of blast heat to horticultural, agricultural and other specified purposes."
Provisional protection only.

JAY. 16th October 1863.

2536. SAMUEL JAY, of Regent Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture of stockings and drawers."
Letters Patent sealed.

MEISEL. 17th October 1863.

2537. MORITZ MEISEL, of Park Walk, Brompton, in the County of Middlesex, for an invention for—"Improvements in apparatus for ascertaining the weight of the load supported by the springs of railway locomotives and carriages, for the purpose of regulating or equalising such load."—*A communication to him from abroad by Ludwig Starck, of Darmstadt, in the Duchy of Hesse Darmstadt.*
Provisional protection only.

BERRISFORD. AINSWORTH. 17th October 1863.

2538. SAMUEL BERRISFORD, of Stockport, in the County of Chester, Engineer and Machinist, and WILLIAM AINSWORTH, of the same place, Overlooker, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

SHANKS. 17th October 1863.

2539. JOHN SHANKS, of Barrhead and Greenock, in the County of Renfrew, North Britain, Plumber, for an invention for—"Improvements relating to water-closet and other valves or taps."
Letters Patent sealed.

HAMPSON. 17th October 1863.

2540. WILLIAM HAMPSON, the younger, of Dukinfield, in the County of Chester, Overlooker, for an invention for—"Certain improvements in looms for weaving."
Letters Patent sealed.

ROUTLEDGE. OMMANNEY. 17th October 1863.

2541. WILLIAM ROUTLEDGE, and FREDERICK FRANCIS OMMANNEY, of the Newbridge Foundry, Salford, in the County of Lancaster, Engineers, for an invention for—"Certain improvements in 'baling boxes' used in packing cotton or other fibrous materials."
Provisional protection only.

CLARK. 17th October 1863.

2542. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in rotary engines."—*A communication to him from abroad by George Bradford MacFarland, of 29, Boulevart St. Martin, Paris, Engineer.* *Provisional protection only.*

MEIRAT. 17th October 1863.

2543. YENN MEIRAT, of Henry Street, Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in the means of propelling vessels."
Provisional protection only.

CLARK. 17th October 1863.

2544. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in sewing and embroidering machines."—*A communication to him from abroad by Antoine Bonnaz, Mechanician, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CHESBROUGH. 17th October 1863.

2545. LEWIS REESE CHESBROUGH, of the City of Brooklyn, in the County of Kings, in the State of New York, one of the United States of America, for an invention for—"An improved lett-off motion for looms."—*A communication to him from Silas Shepard, a person resident at Taunton, in the County of Bristol, in the State of Massachusetts, one of the United States of America.* *Letters Patent sealed.*

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JOHNSON.
17th October 1863.

2546. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for — "Improvements in washing machines."—*A communication to him from abroad by Doctor Isidore Sollier and Baron Gerard Dedel, of Paris, in the Empire of France.*
Complete specification; Letters Patent sealed.

DARLOW.
LAWSON.
17th October 1863.

2547. WILLIAM DARLOW, of North Woolwich Road, in the County of Essex, and ROBERT HENRY LAWSON, of Victoria Terrace, Victoria Docks, in the County of Essex, for an invention for—"Improvements in apparatus or means for obtaining motive-power."
Provisional protection only.

WRIGHT.
17th October 1863.

2548. JOHN WRIGHT, of the Esplanade, Rochester, in the County of Kent, for an invention for—"Improvements in machinery for cutting railway sleepers to receive railway chairs."
Provisional protection only.

MONCKTON.
17th October 1863.

2549. EDWARD HENRY CRADOCK MONCKTON, of the Cavendish Club, Regent Street, London, for an invention for—"Improvements in the means of uniting or joining plates or sheets of metal, which invention is applicable to the construction of boilers, tubes and other useful purposes."
Letters Patent sealed.

DE WYLDÉ.
17th October 1863.

2550. FÉDOR DE WYLDÉ, of Trinity Square, Tower Hill, in the County of Middlesex, for an invention for—"Improvements in the induration of stone, cement, stucco, brick or other analogous materials, also in the manufacture of artificial stone."
Letters Patent sealed.

DE WYLDÉ.
17th October 1863.

2551. FÉDOR DE WYLDÉ, of Trinity Square, Tower Hill, in the County of Middlesex, for an invention for—"Improvements in the separation of molasses and other impurities from sugar crystals."—*A communication to him from abroad by Professor Dr. Henry Schwarz, of Breslau, in the Kingdom of Prussia.*
Letters Patent sealed.

CHAMPION.
19th October 1863.

2552. JAMES CHAMPION, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for preparing, spinning and doubling cotton, flax, wool and other fibrous materials."
Letters Patent sealed.

GILBEE.
19th October 1863.

2553. HENRY GILBEE, of No. 4, South Street, Finsbury, London, for an invention for—"An improved composition for rendering boots and shoes and other similar articles waterproof."—*A communication to him from abroad by Mr. Louis Poncelet, Boot and Shoe Manufacturer, of 10, Rue de la Fidelité, Paris.* *Letters Patent sealed.*

FLETCHER.
19th October 1863.

2554. WILLIAM FLETCHER, of Gloucester, in the County of Gloucester, Gun Maker, for an invention for—"Improvements in the construction of breech loading fire-arms."
Letters Patent sealed.

BUDENBERG.
19th October 1863.

2555. ARNOLD BUDENBERG, of the firm of Schäffer and Budenberg, of Manchester, in the County of Lancaster, for an invention for—"An improved blasting powder."—*A communication to him from abroad by Bernhard August Schäffer and Christian Friedrich Budenberg, of Buckau, Magdeburg, in the Kingdom of Prussia.*
Letters Patent sealed.

WHITLEY.
19th October 1863.

2556. JOSEPH WHITLEY, of Leeds, in the County of York, Brass and Iron Founder, for an invention for—"Improvements in the permanent way of railways."
Provisional protection only.

EYNARD.
19th October 1863.

2557. LOUIS EYNARD, of 48, Langham Street, Portland Place West, for an invention for—"Improvements in breaks for railway trains and other purposes."
Provisional protection only.

CLARK.
19th October 1863.

2558. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in separating ores from their gangues and in apparatus for the same."—*A communication to him from abroad by Jean Joseph Bonnard, Mining Engineer, of 29, Boulevart St. Martin, Paris.*
Provisional protection only.

TAYLOR.
LEES.
LEES.
20th October 1863.

2559. JAMES TAYLOR, Engineer, and JAMES LEES, and JOHN LEES, Tin Plate Workers, all of Oldham, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for opening, cleaning, and mixing cotton or other fibrous materials."
Letters Patent sealed.

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LUEBBERS.
20th October 1863.

2560. ERNEST HENRY LUEBBERS, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"An improved treatment of textile substances to obtain a species of or substitute for cotton."—*A communication to him from abroad by Joseph Jaubert, of Marseilles, in the Empire of France.* *Provisional protection only.*

INGHAM.
WOOD.
20th October 1863.

2561. WILLIAM INGHAM, of the City of Manchester, in the County of Lancaster, and ISAAC WOOD, of Pendleton, near Manchester, aforesaid, for an invention for—"Improvements in the manufacture of copper rollers used for printing calico or other materials." *Letters Patent sealed.*

MORLEY.
20th October 1863.

2562. CORNELIUS THOMAS MORLEY, of Constitution Hill, Birmingham, Warwickshire, Stationer, for an invention for—"Causing a more complete combustion of gas in using it for lighting purposes." *Provisional protection only.*

MILLS.
20th October 1863.

2563. DAVID MILLS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of moulds for casting studs for chains." *Provisional protection only.*

VAUGHAN.
20th October 1863.

2564. JOSEPH VAUGHAN, of the firm of Vaughan Brothers, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in the manufacture of pecks, hoes, adzes and other edge tools, and in tools to be used in the said manufacture." *Letters Patent sealed.*

MICHAELIS.
20th October 1863.

2565. JAMES MICHAELIS, of the firm of Michaelis and Rubino, of 3, Tower Royal, Cannon Street West, and 35, Aldersgate Street, both in the City of London, for an invention for—"Improvements in the manufacture of purses, pocket books and wallets, and in the construction of double action locks for the same and other similar purposes." *Provisional protection only.*

SNELL.
20th October 1863.

2566. WILLIAM SNELL, of No. 16, Clement's Inn, in the County of Middlesex, for an invention for—"Improvements in surface condensers for steam and other vapours."—*A communication to him from abroad by George Wagstaff Yapp, of Paris, in the Empire of France.* *Letters Patent sealed.*

HENNESSY.
20th October 1863.

2567. HENRY HENNESSY, of Wynnefield, Charleville Road, in the County of Dublin, for an invention for—"An improvement in projectiles." *Provisional protection only.*

PETENKOFER.
20th October 1863.

2568. MAX PETENKOFER, Professor of Chemistry in the University of Munich, Member of the Royal Academy of Science in Munich (Bavaria), for an invention for—"Restoring the surface of pictures in oil without any danger to their original state." *Letters Patent sealed.*

BRYANT.
20th October 1863.

2569. JOHN BRYANT, of Edgware Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in vent apparatus for facilitating the drawing off or letting off fluids." *Provisional protection only.*

BARLOW.
20th October 1863.

2570. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in shoes, boots and other coverings for the feet."—*A communication to him from abroad by Jesse Follett, of Turner, in the County of Androscogin, in the State of Maine, in the United States of America.* *Provisional protection only.*

DIXON.
20th October 1863.

2571. WILLIAM ADAM DIXON, of Glasgow, in the County of Lanark, North Britain, Chemist, for an invention for—"Improvements in making aluminate of soda and other aluminous salts." *Provisional protection only.*

DAVIES.
20th October 1863.

2572. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in forming stitches over the edges of fabrics and in machinery connected therewith."—*A communication to him from abroad by Abraham Hart, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

NOTTINGHAM.
20th October 1863.

2573. JOHN WILLIAM NOTTINGHAM, of Clayton Place, Kennington Road, in the County of Surrey, Artist, for an invention for—"Improvements in 'Hansom' cabs, parts of which improvements are also applicable to other wheeled carriages." *Letters Patent sealed.*

DAGLISH.
WINDUS.
20th October 1863.

2574. GEORGE HEATON DAGLISH, and THOMAS WINDUS, both of Saint Helens, Lancashire, Engineers, for an invention for—"Improvements in machinery for bending plates for iron ships and other like purposes." *Letters Patent sealed.*

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GARTON. HILL. 20th October 1863.

2575. CHARLES GARTON, of the City and County of Bristol, Brewer, and THOMAS HILL, of the Town and County of the Town of Southampton, Sugar Refiner, for an invention for—"Improvements in evaporating, cooling and melting, and in apparatus employed therein." *Letters Patent sealed.*

HUTCHINSON. 20th October 1863.

2576. WILLIAM NELSON HUTCHINSON, of Plymouth, in the County of Devon, Major-General in Her Majesty's Army, for an invention for—"Improvements in ordnance." *Provisional protection only.*

RESTELL. 20th October 1863.

2577. THOMAS RESTELL, of Water Lane, Tower St., in the City of London, Engineer, for an invention for—"An improved construction of walking-stick umbrella." *Letters Patent sealed.*

HARTCLIFFE. 21st October 1863.

2578. WILLIAM HARTCLIFFE, of Salford, in the County of Lancaster, Machinist, for an invention for—"Certain improvements in mules for spinning and doubling." *Letters Patent sealed.*

CLARKSON. 21st October 1863.

2579. THOMAS CHARLES CLARKSON, Manufacturer, of 56, Stamford Street, Blackfriars, in the County of Surrey, for an invention for—"Improvements in the manufacture of saddles and harness, and in materials for and in ornamenting the same, which improvements are applicable for parts of carriages, dress and coverings for the head, and other articles." *Letters Patent sealed.*

HINTON. 21st October 1863.

2580. JOSEPH HINTON, of Birmingham, in the County of Warwick, Gun Action Filer, for an invention for—"An improvement or improvements in breech-loading fire-arms." *Letters Patent sealed.*

SCHIELE. 21st October 1863.

2581. CHRISTIAN SCHIELE, of Clarence Buildings, in the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in governors." *Letters Patent sealed.*

TAYLOR. 21st October 1863.

2582. NATHANIEL FORTESCUE TAYLOR, of 5, Manby Street, Stratford, in the County of Essex, Gas Engineer, for an invention for—"Improvements in increasing the illuminating power of coal gas and in the means or apparatus employed therein." *Letters Patent sealed.*

HOWELL. 21st October 1863.

2583. GILBERT HOWELL, of Hawarden Iron Works, near Holywell, Flint, for an invention for—"Improvements in apparatus for condensing metallic and other fumes." *Letters Patent sealed.*

HODSON. NIGHTINGALE. LAIRD. 21st October 1863.

2584. THOMAS HODSON, of Preston, in the County of Lancaster, Mechanic, WILLIAM NIGHTINGALE, of Preston, aforesaid, Factory Operative, and ROBERT LAIRD, of Preston, aforesaid, Mechanic, for an invention for—"Improvements in machinery for carding cotton and other fibrous materials." *Provisional protection only.*

HASELTINE. 21st October 1863.

2585. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in balances or weighing machines."—*A communication to him from abroad by Major-General William Rosecrans and Doctor Anson Platt, both of Cincinnati, Ohio, United States of America.* *Letters Patent sealed.*

ALCAN. 21st October 1863.

2586. EMILE ALCAN, of King Street, in the City of London, Merchant, for an invention for—"An improved method of figuring and ornamenting cloths and other fabrics, and apparatus employed therein."—*A communication to him from abroad by François Vouillon, of Louviers, France.* *Provisional protection only.*

BROOMAN. 21st October 1863.

2587. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in treating ligneous substances, in separating and recovering the fibrous portions therefrom, in preparing, bleaching and sizing the same, and in machinery employed therein."—*A communication to him from abroad by Pierre Celestin Victor Baud and Theodore Casimir Delamarre, both of Paris, France.* *Letters Patent sealed.*

COLBURN. 21st October 1863.

2588. ZERAH COLBURN, of No. 3, Upper Bedford Place, Russell Square, in the County of Middlesex, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

COOKE. 21st October 1863.

2589. WILLIAM COOKE, of No. 9, Spring Gardens, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of saponaceous compounds." *Provisional protection only.*

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DODD.
21st October 1863.

2590. JOHN DODD, of Oldham, in the County of Lancaster, Machinist, for an invention for—"Improvements in mules for spinning and doubling."
Letters Patent sealed.

NEWTON.
21st October 1863.

2591. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in sewing-machines."—*A communication to him from abroad by Walter Davis Richards, of Boston, in the United States of America.* *Provisional protection only.*

CUTLER.
22nd October 1863.

2592. GEORGE CUTLER, junior, of No. 8 Wharf, Wenlock Road, City Road, London, for an invention for—"Improvements in boilers and apparatus used for the generation of steam."
Letters Patent sealed.

BAILLIE.
22nd October 1863.

2593. ROBERT BAILLIE, of the London Yard, Isle of Dogs, in the County of Middlesex, Iron Ship Builder, for an invention for—"Improvements in the construction of floating docks."
Letters Patent sealed.

WILSON.
22nd October 1863.

2594. HENRY WILSON, of Stockton-upon-Tees, in the County of Durham, for an invention for—"An improved lubricator for steam-engines."
Provisional protection only.

CRAVEN.
FOX.
22nd October 1863.

2595. JOHN CRAVEN, and SAMSON FOX, of Leeds, in the County of York, Engineers, for an invention for—"Improvements in machinery or apparatus for punching, shearing, and burnishing."
Letters Patent sealed.

CROLL.
22nd October 1863.

2596. ALEXANDER ANGUS CROLL, of Coleman Street, in the City of London, Engineer, for an invention for—"Improvements in the preparation of matters to be employed as disinfectants."
Letters Patent sealed.

FUSNOT.
22nd October 1863.

2597. CHARLES FUSNOT, of Chaussée de Waterloo, 121, St. Gilles-lez-Bruxelles, Manufacturer, for an invention for—"Certain improvements in the manufacture of cartridge bottoms or entire cartridges composed entirely of the same elements."
Letters Patent sealed.

FRIEND.
WEATHERDON.
22nd October 1863.

2598. JOHN WALTER FRIEND, of Freemantle, Southampton, and BALDWIN FULFORD WEATHERDON, of Kingston-on-Thames, Civil Engineer, for an invention for—"An improved valve and valve gear for regulating the passage or flow of fluids."
Letters Patent sealed.

BULLOCK.
22nd October 1863.

2599. FREDERICK BULLOCK, Rear Admiral, of No. 16, Richmond Terrace, Gravesend, in the County of Kent, for an invention for—"Improvements in ships' logs or apparatus for ascertaining the speed of ships."
Letters Patent sealed.

MITCHELL.
22nd October 1863.

2600. JAMES MITCHELL, of Dyke Head, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in sinking, quarrying and excavating in the earth."
Provisional protection only.

PARKER.
22nd October 1863.

2601. CHARLES PARKER, of Dundee, in the County of Forfar, North Britain, Machinist, for an invention for—"Improvements in machinery or apparatus for winding yarns or threads."
Letters Patent sealed.

WEEMS.
22nd October 1863.

2602. JOHN WEEMS, of Johnstone, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in machinery, apparatus or means for drying, cleaning and cooling grain and other vegetable products."
Letters Patent sealed.

KINDER.
INGLIS.
22nd October 1863.

2603. ARTHUR KINDER, of 20, Cannon Street, in the City of London, Engineer, and JOHN INGLIS, of Ellesmere Road, Old Ford, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of metallic foils and in the apparatus to be employed therein."
Letters Patent sealed.

NOAKES.
WOOD.
22nd October 1863.

2604. BENJAMIN NOAKES, and FREDERICK JOHN WOOD, of Bermondsey, in the County of Surrey, Iron Cask Manufacturers, for an invention for—"Improvements in the manufacture of metallic casks, bottles and other similar vessels, and in machinery employed therein."
Letters Patent sealed.

POWNALL.
22nd October 1863.

2605. CHARLES JAMES POWNALL, of Jermyn Street, in the City of Westminster, for an invention for—"Improvements in preparing and cleansing vegetable fibres, and in machinery employed therein."
Letters Patent sealed.

BURDON.
22nd October 1863.

2606. WILLIAM WHARTON BURDON, of the Town and County of Newcastle-upon-Tyne, Esquire, for an invention for—"Improvements in reducing and preparing wood for the manufacture of paper and pulp."
Letters Patent sealed.

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BROOMAN.
22nd October 1863.

2607. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A new material for tanning."—*A communication to him from abroad by Antoine François Michel, of Lyons, France.*
Letters Patent sealed.

BRIDSON.
ALCOCK.
22nd October 1863.

2608. HENRY BRIDSON, of Bolton, in the County of Lancaster, Bleacher, and JOHN ALCOCK, of the same place, Millwright, for an invention for—"Improvements in machinery for plaiting or folding fabrics." *Letters Patent sealed.*

DICKINS.
DICKINS.
HEYWOOD.
22nd October 1863.

2609. THOMAS DICKINS, ALBERT LUNGLEY DICKINS, and HARVEY HEYWOOD, of Middleton, in the County of Lancaster, Silk Dyers, for an invention for—"Improvements in dyeing threads of silk." *Provisional protection only.*

TURNER.
22nd October 1863.

2610. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

JÜRGENS.
23rd October 1863.

2611. JÜRGEN LORENZ JÜRGENS, of Oldsum, Isle of Föhr, Denmark, Navigator, at present residing at No. 4, Noel Street, Islington, in the County of Middlesex, for an invention for—"Improvements in vessels of war." *Letters Patent sealed.*

MARRIOTT.
23rd October 1863.

2612. BENJAMIN MARRIOTT, of 38, Upper Street, Islington, in the County of Middlesex, Watch Maker, for an invention for—"An improvement in watches, consisting in the construction of cylindrical dead beat independent centre seconds watches." *Provisional protection only.*

BOYLE.
23rd October 1863.

2613. MARY ANNE BOYLE, of Claremont House, Holland Street, Kensington, in the County of Middlesex, for an invention for—"Improvements in portable writing cases and despatch boxes." *Letters Patent sealed.*

MARTIN.
23rd October 1863.

2614. ALFRED JOSEPH MARTIN, of 2, Vernon Terrace, Roman Road North, Bow, in the County of Middlesex, Chemist, for an invention for—"An improved burner for burning petroleum, paraffin or other hydrocarbon oils, consuming the smoke without the use of a draught chimney." *Provisional protection only.*

CLAES.
23rd October 1863.

2615. JOSEPH CLAES, of 18, Rue de l'Echiquier, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved apparatus for regulating the emission of gas."—*A communication from Pierre Alsina, Engineer, a person resident at Madrid, Calle Baño, 6 (Spain).* *Provisional protection only.*

WEBSTER.
23rd October 1863.

2616. JOSEPH THOMAS WEBSTER, of Mansfield, in the County of Nottingham, for an invention for—"Improvements in driving the spindles of doubling and spinning frames. *Letters Patent sealed.*

RONALD.
23rd October 1863.

2617. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements applicable to the machinery used for spinning hemp, flax, manilla, wool and other like long fibrous material, from the hand or when previously formed into a 'sliver.'" *Letters Patent sealed.*

CASSAIGNES.
23rd October 1863.

2618. VICTOR JULIEN CASSAIGNES, of No. 35, Rue de Rivoli, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of the prisms, lenses and glasses of stereoscopes, and in ornamenting glass."
Provisional protection only.

TOLHAUSEN.
23rd October 1863.

2619. FREDERICK TOLHAUSEN, of No. 17, Faubourg Montmartre, Paris, but now of No. 12, Southampton Buildings, Chancery Lane, Patent Agent (London), for an invention for—"An improved mechanism for regulating the working of springs."—*A communication to him from abroad by Georges Badaul, a Merchant, residing in the Town of St. Etienne, France.* *Provisional protection only.*

PARKER.
23rd October 1863.

2620. JAMES PARKER, of No. 6, Lilford Road, Camberwell, in the County of Surrey, Gentleman, for an invention for—"Improvements in the application of steam combined with air as a motive-power and for other purposes." *Letters Patent sealed.*

NEWTON.
23rd October 1863.

2621. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of manufacturing railway wheels."—*A communication to him from abroad by James Millholland, of Philadelphia, in the United States of America.*
Provisional protection only.

WARDLE.
BRINDLEY.
23rd October 1863.

2622. ALFRED WARDLE, of Euston Road, in the County of Middlesex, and JOSEPH BRINDLEY, of Hastings Street, Burton Crescent, in the County of Middlesex, for an invention for—"Improvements in smoking pipes."
Provisional protection only.

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BETTS.
24th October 1863.

2623. WILLIAM BETTS, of Wharf Road, City Road, in the County of Middlesex, Capsule Manufacturer, for an invention for—"Improvements in the manufacture of metallic capsules for bottles and similar vessels, and in the apparatus or means for applying or fixing such capsules thereon." *Letters Patent sealed.*

CREASE.
24th October 1863.

2624. EDWARD SMITH CREASE, of Tavistock, in the County of Devon, Mining Engineer, for an invention for—"Improvements in machinery for drilling, boring or excavating rock or other earthy substances." *Letters Patent sealed.*

DAVIDSON.
24th October 1863.

2625. JOHN DAVIDSON, of Leek, in the County Stafford, Silk Manufacturer, for an invention for—"Improvements in doubling yarns or threads of silk and other fibrous substances, and in the machinery employed therein." *Letters Patent sealed.*

THOMAS.
24th October 1863.

2626. JAMES THOMAS, of No. 5A, Great Bolton Street, Kennington Park, in the County of Surrey, Gas Meter Indicator Maker, for an invention for—"Improvements in gas meter indicators." *Provisional protection only.*

HASELTINE.
24th October 1863.

2627. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A new attachment to coverings for the head and to other articles of dress, for lighting matches."—*A communication to him from abroad by Justus Osman Woods, of the City, County and State of New York, United States of America.* *Provisional protection only.*

BAKER.
24th October 1863.

2628. FRANCIS BRYAN BAKER, of the firm of Messrs. G. and F. B. Baker, of Sherwood Street, Nottingham, for an invention for—"Improvements in apparatus used in dressing lace and other textile fabrics, and suitable also to the application of dyes or colouring matters thereto." *Letters Patent sealed.*

BROWN.
WAY.
EVANS.
24th October 1863.

2629. JAMES BROWN, of No. 27, Aldgate, and JOHN THOMAS WAY, of No. 106, Leadenhall Street, and THOMAS MULLETT EVANS, of the same place, all in the City of London, for an invention for—"Improvements in preparing cements and varnishes." *Letters Patent sealed.*

LOCKE.
WARRINGTON.
CARRETT.
MARSHALL.
TELFORD.
24th October 1863.

2630. WILLIAM LOCKE, and JOHN WARRINGTON, Coal Owners, of Kippax, near Leeds, in the County of York, WILLIAM ELLIOT CARRETT, WILLIAM EBENEZER MARSHALL, and JOHN TELFORD, of Leeds, in the County of York, Engineers, for an invention for—"Improvements in the working and mining of coal, minerals and earthy matters, and in the machinery, apparatus and means to be employed therein." *Letters Patent sealed.*

HANNART.
24th October 1863.

2631. LOUIS JOSEPH HANNART, of Brussels, Belgium, for an invention for—"An improved clasp or fastening for gloves or other wearing apparel, for umbrellas, travelling bags or other similar objects." *Letters Patent sealed.*

POTTER.
POTTER.
24th October 1863.

2632. ARTHUR POTTER, and WILLIAM PERCEVAL POTTER, both of Longfleet, in the County of Dorsetshire, for an invention for—"Improvements in railway waggons for the transfer of minerals and general merchandize." *Provisional protection only.*

SELLAR.
24th October 1863.

2633. ALEXANDER SELLAR, of Market Place, Reading, in the County of Berks, for an invention for—"An improved instrument for lubricating rifles and other descriptions of fire-arms, also ordnance." *Provisional protection only.*

BROWNE.
24th October 1863.

2634. BENJAMIN BROWNE, of No. 49, King William Street, in the City of London, Civil Engineer and Patent Agent, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Richard Mott Wanzer, of Hamilton, Canada West, America.* *Provisional protection only.*

ALISON.
24th October 1863.

2635. ALEXANDER ALISON, of 72, Sloane Street, Chelsea, in the County of Middlesex, Gentleman, for an invention for—"Improvements in atmospheric railways and in carriages for the same." *Provisional protection only.*

LITTLEBOY.
26th October 1863.

2636. RICHARD LITTLEBOY, of No. 2, John's Terrace, St. Leonard's Road, Bromley, in the County of Middlesex, for an invention for—"Improvements in the manufacture of nose-bags." *Letters Patent sealed.*

STEINMETZ.
26th October 1863.

2637. BERNHARD STEINMETZ, of 97, Rue Notre Dame Des Champs, Paris, in the Empire of France, at present residing at 12, Newgate Street, in the City of London, for an invention for—"Improvements in locks for bags." *Letters Patent sealed.*

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PARKER. 26th October 1863.

2638. FREDERICK PARKER, of the Town and County of Cambridge, Carriage Builder, for an invention for—"Improvements in carriages." *Letters Patent sealed.*

MARSH. 26th October 1863.

2639. THEOPHILUS MARSH, of Sheffield, in the County of York, for an invention for—"Improvements in projectiles." *Provisional protection only*

HEALEY. 26th October 1863.

2640. SAMUEL JAMES HEALEY, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in water gauges applicable to steam-boilers and other purposes." *Provisional protection only.*

VIAN. 26th October 1863.

2641. MARIUS VIAN, of Marseilles, in the Empire of France, Shipbuilder, for an invention for—"Certain compositions for preserving iron ships and other submerged iron work from corrosion and from fouling." *Letters Patent sealed.*

NICHOLAS. 26th October 1863.

2642. JAMES NICHOLAS, of Newton, in the County of Lancaster, Oil Refiner, for an invention for—"Improvements in treating Canadian petroleum and other mineral oils of a similar nature." *Provisional protection only.*

GEDGE. 26th October 1863.

2643. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved pillow."—*A communication to him from abroad by Ernest Loriot, of the Rue du Faubourg Saint Martin, Paris, France.* *Letters Patent sealed.*

BAGGS. 26th October 1863.

2644. ISHAM BAGGS, of Cambridge Terrace, Islington, in the County of Middlesex, for an invention for—"Improvements in the means of and apparatus for paralysing, capturing or killing fish, birds and other animals." *Letters Patent sealed.*

WILLCOX. 26th October 1863.

2645. JAMES WILLCOX, of 1, Ludgate Hill, in the City of London, Sewing-Machine Manufacturer, for an invention for—"Improvements in sewing-machines." —*A communication to him from abroad by Charles Henry Willcox, of New York, in the United States of America.* *Letters Patent sealed.*

BLAKE. 26th October 1863.

2646. ALFRED BLAKE, of Newport, Monmouthshire, Brewer, for an invention for—"An improved refrigerator for cooling worts for brewing, or other liquids requiring cooling, and for improving brewers' refrigerators now in use." *Letters Patent sealed.*

CLIFTON. GREENWOOD. 26th October 1863.

2647. EDWARD CLIFTON, Ironmonger, and BENJAMIN GREENWOOD, Brush Manufacturer, both of Southfield Square, in the Township of Manningham, Parish of Bradford, and County of York, for an invention for—"Improvements in the manufactures of brushes used in machines employed for preparing and combing wool, cotton, silk and other fibrous substances." *Letters Patent sealed.*

MARSHALL. 27th October 1863.

2648. JOHN MARSHALL, of No. 126, Pentonville Road, in the County of Middlesex, Civil and Mechanical Engineer, for an invention for—"Certain improvements in the expression of oil from oil yielding substances, and in the production of oil cake and other residuary matters." *Letters Patent sealed.*

HOLDERNESS. 27th October 1863.

2649. THOMAS HUNTER HOLDERNESS, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in propelling navigable vessels." *Provisional protection only.*

WILSON. 27th October 1863.

2650. JOHN CHARLES WILSON, of 14 A, Cannon Street, London, County of Middlesex, Civil and Mechanical Engineer, for an invention for—"A new mode of mounting ordnance and the machinery and apparatus composing the same, also the machinery and apparatus for working said ordnance, and for loading, cleaning and counteracting its recoil when fired." *Letters Patent sealed.*

GRASON. 27th October 1863.

2651. THOMAS GRASON, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Certain improvements in boots, shoes, clogs and such like coverings for the feet." *Letters Patent sealed.*

ATHERLEY. 27th October 1863.

2652. EDMOND GIBSON ATHERLEY, of Orme Square, Bayswater, in the County of Middlesex, Barrister-at-law, for an invention for—"Obtaining motive-power by certain arrangements of machinery and water." *Provisional protection only.*

LIVINGSTONE. 27th October 1863.

2653. WILLIAM LIVINGSTONE, of 51, Glengall Road, Poplar, in the County of Middlesex, Engineer, for an invention for—"An improved machine for punching, shearing and rivetting metals." *Provisional protection only.*

HUTCHINSON. HOLLINGWORTH. 27th October 1863.

2654. JOHN HUTCHINSON, and JAMES HOLLINGWORTH, of Dobcross, Saddleworth, in the County of York, Machine Makers, for an invention for—"Improvements in means or apparatus employed in weaving." *Letters Patent sealed.*

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O'Neill.
27th October 1863.

2655. Patrick Benignus O'Neill, of Warwick Street, Regent Street, in the County of Middlesex, Gentleman, for an invention for—"An improved salinometer, which is applicable also as a hydro-meter and for other similar or analogous purposes." *Letters Patent sealed.*

Smith.
27th October 1863.

2656. Robert Smith, of 24, Higher Chatham Street, in the City of Manchester, County of Lancaster, Machinist, for an invention for—"Improvements in doubling and winding machines." *Letters Patent sealed.*

Hollands.
27th October 1863.

2657. Edward Richard Hollands, of No. 16, Charles Street, Northampton Square, in the County of Middlesex, Machinist, for an invention for—"Improvements in machinery for punching, cutting and pressing metals and other materials." *Letters Patent sealed.*

Carr.
27th October 1863.

2658. Mark William Carr, of the Knoll, Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the manufacture of wooden sleepers for railways." *Provisional protection only.*

Firth.
Firth.
Sturgeon.
27th October 1863.

2659. William Firth, of Burley, near Leeds, in the County of York, Merchant, Samuel Firth, of the same place, Gentleman, and John Sturgeon, of Leeds, aforesaid, Consulting Engineer, for an invention for—"Improvements in machinery for cutting and boring coal, stone or other minerals." *Letters Patent sealed.*

Wanklyn.
28th October 1863.

2660. William Wanklyn, of The Albion Mills, Bury, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in apparatus for opening and conditioning cotton and other fibrous substances." *Provisional protection only.*

Marshall.
28th October 1863.

2661. James Marshall, of Stockport, in the County of Chester, Cotton Spinner, for an invention for—"Certain improvements in apparatus for applying adhesive substances to spindles employed in spinning cotton and other fibrous materials, and for the lubrication thereof." *Letters Patent sealed.*

Coronel.
28th October 1863.

2662. Abraham Senior Coronel, of No. 256, High Holborn, in the County of Middlesex, for an invention for—"An improved preparation of tobacco for fumigating purposes." *Provisional protection only.*

Gedge.
28th October 1863.

2663. William Edward Gedge, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved system of permanent advertisement."—*A communication to him from abroad by Basile Victor Larsonneau, of the Faubourg Saint Martin, Paris, France.* *Complete specification; Letters Patent sealed.*

Procter.
28th October 1863.

2664. Stephen Procter, of Elsecar, in the County of York, Mechanic, for an invention for—"An improved instrument for extracting corks from bottles." *Letters Patent sealed.*

Oldfield.
28th October 1863.

2665. Edward Oldfield, of the firm of Oddy and Oldfield, of the Adelphi Iron Works, Salford, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in self-acting mules for spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

Bonneville.
28th October 1863.

2666. Henri Adrien Bonneville, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"An improvement in clasps for portmonnaies, pocket books, bags and other like uses."—*A communication from Paul Claparede, a person resident at Montpelier, in the Department of the Herault, France.* *Provisional protection only.*

Needham.
Pollitt.
28th October 1863.

2667. Richard Needham, of Dukinfield, in the County of Chester, and James Pollitt, of Heywood, in the County of Lancaster, Engineers, for an invention for—"Improved equilibrium valves for steam-engines and other purposes." *Provisional protection only.*

Cavanah.
Cavanah.
28th October 1863.

2668. James Cavanah, and John Cavanah, both of 21, Parron Street, Paddington, Liverpool, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for making bricks and tiles, applicable also for washing and drying clay." *Provisional protection only.*

Henry.
28th October 1863.

2669. Michael Henry, of 84, Fleet Street, in the City of London, Patent Agent for an invention for—"An improvement in or addition to military knapsacks, travelling bags, and other similar articles."—*A communication to him from abroad by Antoine Perrin, Henry Augustin Joseph Hovelacque, Edouard Joseph Hovelacque and Emile August Hovelacque, all of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

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NALL.
28th October 1863.

2670. WILLIAM NALL, of No. 1, Wharf Street, Leicester, for an invention for—"Improvements in ornamenting glass and sheet gelatine." *Letters Patent sealed.*

DONISTHORPE.
28th October 1863.

2671. GEORGE EDMOND DONISTHORPE, of Leeds, in the County of York, for an invention for—"Improvements in apparatus used when getting coal and other minerals." *Letters Patent sealed.*

JONES.
28th October 1863.

2672. ROBERT BAKER JONES, of Limerick, Gentleman, for an invention for—"Improvements in portable cooking apparatus." *Letters Patent sealed.*

KENNEDY.
28th October 1863.

2673. JOHN KENNEDY, of Whitehaven, in the County of Cumberland, Shipbuilder, for an invention for—"Improvements in the construction of ships of war and other vessels, and in masting or rigging the same." *Letters Patent sealed.*

BROOMAN.
28th October 1863.

2674. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in instruments for taking astronomical and other observations."—*A communication to him from abroad by Charles Emanuel, of Levallois, France.* *Letters Patent sealed.*

BROOMAN.
28th October 1863.

2675. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in clocks, watches and other time-keepers."—*A communication to him from abroad by Felix Cenoni Bouscatie, of Paris, France.* *Provisional protection only.*

EVANS.
29th October 1863.

2676. ORMROD COFFEEN EVANS, Citizen of the United States of America, but now resident at Manchester, County of Lancaster, for an invention for—"Improvements in digging machinery." *Letters Patent sealed.*

JOHNSON.
29th October 1863.

2677. JOHN ROBERT JOHNSON, of No. 31, Red Lion Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of lubricating compounds." *Letters Patent sealed.*

RAWLINGS.
29th October 1863.

2678. JAMES RAWLINGS, of Carlton Hill East, in the County of Middlesex, Gentleman, for an invention for—"Improved means of attaching cords to window sashes." *Letters Patent sealed.*

NORMANDY.
30th October 1863.

2679. ALPHONSE RENÉ LE MIRE NORMANDY, of Odin Lodge, King's Road, Clapham Park, in the County of Surrey, for an invention for—"Improvements in the manufacture of playing cards." *Letters Patent sealed.*

GISBORNE.
30th October 1863.

2680. FREDERIC NEWTON GISBORNE, of No. 3, Adelaide Place, London Bridge, in the City of London, Engineer and Electrician, for an invention for—"An improved composition for coating ships' bottoms." *Letters Patent sealed.*

NASH.
30th October 1863.

2681. JOHN NASH, of No. 37, Princes Street, Leicester Square, in the County of Middlesex, Furniture Dealer, for an invention for—"An improved mattress for beds." *Letters Patent sealed.*

HAWORTH.
30th October 1863.

2682. JOHN HAWORTH, of No 15, Hart Street, Bloomsbury, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the improved method of conveying electric signals and telegrams without the intervention of any continuous artificial conductor." *Letters Patent sealed.*

COCHRANE.
30th October 1863.

2683. HENRY COCHRANE, of Ormesby Iron Works, Middlesborough-on-Tees, in the County of York, Engineer, for an invention for—"Improvements in surface condensers, also applicable to the refrigeration or cooling of fluids." *Letters Patent sealed.*

NEILSON.
30th October 1863.

2684. WALTER MONTGOMERIE NEILSON, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in taps, cocks, or valves."—*A communication to him from abroad by Henri Jerimie Cristen, of Paris, France.* *Provisional protection only.*

GADD.
30th October 1863.

2685. WILLIAM GADD, the younger, of the Town and County of the Town of Nottingham, Lace Manufacturer, for an invention for—"Improvements in machinery or apparatus for the manufacture of bonnet and cap fronts, which improvements are also applicable to the production of ornamental effects to other trimmings for wearing-apparel." *Letters Patent sealed.*

DURAND.
30th October 1863.

2686. FRANÇOIS DURAND, of Paris, France, Mechanical Engineer, for an invention for—"Improvements in cotton gins." *Letters Patent sealed.*

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ROBERTS.
30th October 1863.

2687. MARTYN JOHN ROBERTS, of Pendarren House, Crickhowell, in the County of Brecon, Esquire, for an invention for—"Improvements in apparatus for oiling wool." *Letters Patent sealed.*

ROSSELET.
30th October 1863.

2688. GEORGE ROSSELET, of 2, Rue Sainte Appoline, Paris, Empire of France, for an invention for—"Improvements in apparatus for sustaining and raising ships or vessels, applicable also as life buoys." *Provisional protection only.*

TURNER.
NEWTON.
30th October 1863.

2689. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, and WILLIAM EDWARD NEWTON, of Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in looms for weaving terry and cut pile fabrics, parts of which improvements are also applicable to other kinds of looms." *Letters Patent sealed.*

RUSS.
30th October 1863.

2690. BARNABAS RUSS, of Bristol, in the County of Gloucester, Engineer, for an invention for—"Improvements in the construction of iron and other ships, vessels and batteries of war, and of cupolas and armour plates applicable thereto, parts of which improvements are also applicable to other useful purposes." *Letters Patent sealed.*

TURNER.
30th October 1863.

2691. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

VERRAN.
30th October 1863.

2692. WILLIAM VERRAN, of Penryn, Cornwall, Mechanical Engineer, for an invention for—"Improvements in machinery for obtaining motive-power by means of steam." *Letters Patent sealed.*

CLOW.
30th October 1863.

2693. HENRY CLOW, of Bland Street, Dover Road, in the County of Surrey, for an invention for—"Improvements in ovens." *Provisional protection only.*

BUSBRIDGE.
30th October 1863.

2694. GEORGE FREDERICK BUSBRIDGE, of East Malling Mills, in the County of Kent, for an invention for—"Improvements in apparatus for feeding sheets of sized or unsized paper to a drying machine." *Letters Patent sealed.*

BRIGHAM.
BICKERTON.
30th October 1863.

2695. JOHN BRIGHAM, and RICHARD BICKERTON, of the Town and County of Berwick-on-Tweed, North Britain, Implement Makers, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

JOHNSON.
30th October 1863.

2696. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of soap."—*A communication to him from abroad by Jean Baptiste Vasseur and Alexis Mahot, both of Paris, in the Empire of France.* *Letters Patent sealed.*

BARLOW.
31st October 1863.

2697. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in machinery employed in the manufacture of wool and hair felting."—*A communication to him from abroad by Jesse Albert Locke, of Boston, in the State of Massachusetts, in the United States of America.* *Letters Patent sealed.*

WASSERBURGER.
BESSUNGER.
31st October 1863.

2698. ANTON WASSERBURGER, of No. 9, Calvert Street, Shoreditch, in the Parish of Shoreditch, in the County of Middlesex, Merchant, and THEODORE BESSUNGER, of the same place, Merchant, for an invention for—"Improvements in the manufacture of show cards, window tickets, and ornamental labels, as advertising mediums." *Provisional protection only.*

PARKES.
31st October 1863.

2699. SAMUEL HICKLING PARKES, of the firm of James Parkes and Son, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in opera glasses, telescopes, microscopes, spectacles and other optical instruments." *Letters Patent sealed.*

TASKER.
31st October 1863.

2700. WILLIAM TASKER, the younger, of Waterloo Iron Works, and of Manor House, in the Parish of Upper Clatford, in the County of Southampton, for an invention for—"Improvements in the making of safety paper and in the machinery or apparatus employed therein." *Letters Patent sealed.*

RENNIE.
31st October 1863.

2701. JAMES RENNIE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of chandeliers, lamps and other apparatus employed in distributing light." *Provisional protection only.*

LAW.
31st October 1863.

2702. WILLIAM LAW, of Northampton, in the County of Northampton, Cabinet Manufacturer, for an invention for—"Improvements in the construction of articles of furniture known as wardrobes, including improved arrangements for attaching doors to the same, such improvements in attaching doors being applicable to other articles of furniture." *Letters Patent sealed.*

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GETTY.
31st October 1863.

2703. JOHN GETTY, of Temple Street, Liverpool, in the County of Lancaster, for an invention for—"Improvements in building ships and vessels."
Provisional protection only.

BROWN.
31st October 1863.

2704. JOHN HARCOURT BROWN, of No. 11, Adam Street, Strand, London, Gentleman, for an invention for—"Improvements in fastening and securing envelopes, letters, despatches, parcels, packages and other similar articles."
Letters Patent sealed.

POPE.
31st October 1863.

2705. WILLIAM POPE, of the City and County of Bristol, Engineer and Millwright, for an invention for—"Improvements in machinery for breaking or crushing stone."
Letters Patent sealed.

WILSON.
31st October 1863.

2706. JOHN WILSON, of Upper Poppleton, in the County of York, for an invention for—"Improvements in thrashing machines."
Letters Patent sealed.

HOLMAN.
31st October 1863.

2707. STEPHEN HOLMAN, of 18, Cannon Street, London, E.C., in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery for raising and forcing fluids, parts of which improvements are also applicable to steam-engines, blast-engines, exhausters and other machines."
Letters Patent sealed.

JONES.
31st October 1863.

2708. EDWARD JONES, of Charlton, in the County of Kent, for an invention for—"Improvements in the manufacture of bricks, drain pipes, traps, sewage tanks and water-closet pans and valves, and the machinery and apparatus necessary for the same."
Letters Patent sealed.

ADAMS.
SCOTT.
2nd November 1863.

2709. THOMAS ADAMS, and JOHN SCOTT, of 14, Little Tower Street, in the City of London, Stationers, for an invention for—"An improved kind of envelope for the transmission of patterns or samples of merchandize by post."
Provisional protection only.

VANDENVINNE.
2nd November 1863.

2710. FLORENT JOSEPH VANDENVINNE, of No. 37, Rue Aux Laines, Brussels, in the Kingdom of Belgium, Manufacturer, for an invention for—"Improvements in machinery for excavating land, making cuttings and other earthworks."
Letters Patent sealed.

NEWTON.
2nd November 1863.

2711. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in clock work movements."—*A communication to him from abroad by Michel Ange Bosio, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

WINTOUR.
2nd November 1863.

2712. THOMAS FITZGERALD WINTOUR, of Clifton, near Bristol, in the County of Gloucester, Esquire, for an invention for—"Improvements in ventilators and fire guards."
Provisional protection only.

ALDERTON.
3rd November 1863.

2713. THOMAS WRIGHT ALDERTON, of Ipswich, in the County of Suffolk, Machinist, for an invention for—"Improvements in sewing-machines."
Letters Patent sealed.

PASTORELLI.
3rd November 1863.

2714. FRANCIS JOHN PASTORELLI, of 208, Piccadilly, in the County of Middlesex, Optician, for an invention for—"Improvements in the construction of surveyor's levels and other surveying instruments."
Letters Patent sealed.

DAVY.
3rd November 1863.

2715. DAVID DAVY, junr., of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in steam hammers."
Letters Patent sealed.

MACINTOSH.
3rd November 1863.

2716. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in taps or cocks for liquids or gases."
Letters Patent sealed.

EATON.
3rd November 1863.

2717. RALPH EATON, of Stockport, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery for ruling or marking leather."
Letters Patent sealed.

BATEMAN.
3rd November 1863.

2718. SAMUEL BATEMAN, of Asnieres, in the Empire of France, for an invention for—"Improvements in machinery for combing wool and other fibrous substances."
Letters Patent sealed.

BOOTH.
3rd November 1863.

2719. JOHN PETER BOOTH, of Cork, in the Kingdom of Ireland, Feather Purifier, for an invention for—"Improvements in beds and bedding."
Provisional protection only.

RÉVY.
3rd November 1863.

2720. JULIAN JOHN RÉVY, of No. 28, Grosvenor Street, Eaton Square, Civil Engineer, for an invention for—"Improvements in the manufacture of explosive compounds."
Letters Patent sealed.

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HENRY.
3rd November 1863.

2721. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of zinc white."—*A communication to him from abroad by Alphonse Pallu, of 33, Boulevart Saint Martin, Paris, France.* *Provisional protection only.*

LIVESEY.
EDWARDS.
4th November 1863.

2722. JAMES LIVESEY, of 75, Cannon Street West, and JOHN EDWARDS, of 29, Basinghall Street, in the City of London, for an invention for—"Improvements in the permanent way of railways and fastenings for the same." *Letters Patent sealed.*

SAUTREUIL.
4th November 1863.

2723. PIERRE AUGUSTIN SAUTREUIL, of Fécamp, France, for an invention for—"An improved apparatus for the lubrication of bearings, shafts, or other parts of machinery subject to friction." *Letters Patent sealed.*

VILLE.
4th November 1863.

2724. GUILLAUME VILLE, of Paris, France, Professor at the Museum of Natural History, for an invention for—"Improvements in treating natural phosphates of lime for agricultural purposes." *Letters Patent sealed.*

THOMAS.
4th November 1863.

2725. JOHN THOMAS, of Battersea, in the County of Surrey, Iron Founder, for an invention for—"Improvements in preparing ores and earths containing copper for smelting." *Letters Patent sealed.*

HUGHES.
4th November 1863.

2726. EDWARD HUGHES, of Bagillt, in the County of Flint, for an invention for —"Improvements in fans for forcing and exhausting air or other gases." *Letters Patent sealed.*

HOWE.
4th November 1863.

2727. ELIAS HOWE, junior, of the City of New York, and United States of America, but now of No. 8, Ludgate Street, in the City of London, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

TANGYE.
4th November 1863.

2728. JOSEPH TANGYE, of the firm of Tangye Brothers and Price, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in portable hydraulic shearing and rivetting machines." *Complete specification; Letters Patent sealed.*

BROOKS.
INWARDS.
4th November 1863.

2729. ROBERT BROOKS, of Dunstable, in the County of Bedford, and CHARLES INWARDS, of Bute Street, Luton, in the said County of Bedford, Professor of Music, for an invention for—"Improved arrangements for facilitating the teaching and playing of stringed instruments of the character of the violin, viola, violoncello, double bass and guitar." *Letters Patent sealed.*

GILLETT.
4th November 1863.

2730. ABRAM GILLETT, of Highway Farm, in the County of Berks, Engineer, for an invention for—"Improvements in machines for cutting chaff and such like substances." *Provisional protection only.*

BARRAL.
COCHERY.
4th November 1863.

2731. JEAN AUGUSTIN BARRAL, Officer of L. d'h', Chemist, and LOUIS ADOLPHE COCHERY, Landowner, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, for an invention for—"Certain improvements in the manufacture of manure." *Letters Patent sealed.*

MAW.
4th November 1863.

2732. JOHN HORNBY MAW, of Broseley, in the County of Salop, Gentleman, for an invention for—"Improvements in the application of preservative coatings or compositions to the bottoms of ships and vessels." *Letters Patent sealed.*

AUDINWOOD.
4th November 1863.

2733. WILLIAM AUDINWOOD, of Castle Donnington, in the County of Leicester, Proprietor of Steam Thrashing Machines, for an invention for—"Improvements in thrashing-machines." *Provisional protection only.*

LUNEAU.
4th November 1863.

2734. MICHEL LUNEAU, of No. 60, Boulevart De Strasbourg, Paris, in the Empire of France, Military Collar Manufacturer, for an invention for—"Improvements in the manufacture of hat or cap frames." *Provisional protection only.*

CRAVEN.
CRAVEN.
CRAVEN.
5th November 1863.

2735. GREENWOOD CRAVEN, WILLIAM CRAVEN, and JOHN CRAVEN, of the Vauxhall Iron Works, in the City of Manchester, Engineers and Tool Makers, for an invention for—"Improvements in machinery for cutting and planing iron and other metals, particularly applicable to machinery for cutting and planing armour plates." *Provisional protection only.*

NORTHROP.
5th November 1863.

2736. JONATHAN NORTHROP, of Thornton, near Bradford, in the County of York, for an invention for—"An improved apparatus for making fringes." *Provisional protection only.*

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DUTTON. 5th November 1863.

2737. EDWARD KENWORTHY DUTTON, of Stretford, in the County of Chester, Mechanical Engineer, for an invention for—"Certain improvements in apparatus for coating or covering the surfaces of rollers or cylinders with leather or other material." *Provisional protection only.*

FARRA. 5th November 1863.

2738. THOMAS FARRA, of Manchester, in the County of Lancaster, Salesman to Messrs. Tootal, Broadhurst, Lee and Company, for an invention for—"Certain improvements in 'skirtings' employed as wearing-apparel." *Provisional protection only.*

SMITH. 5th November 1863.

2739. RICHARD SMITH, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in preparing or obtaining coloring matters." *Letters Patent sealed.*

BLACKBURN. 5th November 1863.

2740. BEWICKE BLACKBURN, of Chelsea, in the County of Middlesex, Esquire, for an invention for—"An improved coupling or buckle." *Letters Patent sealed.*

PROGER. 5th November 1863.

2741. WILLIAM PROGER, of George Street, in the County of Middlesex, Tin Plate Worker, for an invention for—"Improvements in lanterns and lamps for the same." *Provisional protection only.*

HANCOCK. VICKERS. 5th November 1863.

2742. HENRY HANCOCK, of 28, Claylands Road, Clapham Road, in the County of Surrey, and WILLIAM HENRY VICKERS, junior, of 24, Blackman Street, Borough, in the same County, for an invention for—"A new system of fastening for doors, windows, safes, chests and other similar purposes." *Provisional protection only.*

WHITWORTH. 5th November 1863.

2743. JOSEPH WHITWORTH, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in the treatment and application of steel and homogeneous metal." *Letters Patent sealed.*

BESSEMER. 5th November 1863.

2744. HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in the manufacture of railway bars." *Letters Patent sealed.*

SMITH. 5th November 1863.

2745. SYDNEY SMITH, of Hyson Green Brass Works, near Nottingham, for an invention for—"Improvements in safety valves for steam-boilers, and in valves and taps for regulating the flow of fluids." *Letters Patent sealed.*

BESSEMER. 5th November 1863.

2746. HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in the manufacture of malleable iron and steel, and in the apparatus employed in such manufacture." *Letters Patent sealed.*

TAIT. 5th November 1863.

2747. ROBERT THOMAS TAIT, of No. 10, Essex Street, Strand, in the County of Middlesex, for an invention for—"Improvements in the manufacture of woollen garments." *Letters Patent sealed.*

SPEIGHT. 5th November 1863.

2748. GEORGE SPEIGHT, of 5, Saint John Street Road, Clerkenwell, in the County of Middlesex, Manufacturer, for an invention for—"An improvement in collars and cuffs." *Provisional protection only.*

SICKELS. 5th November 1863.

2749. FREDERICK ELSWORTH SICKELS, of New York City, United States of America, but now residing at Bute Street, Brompton, in the County of Middlesex, Engineer, for an invention for—"An improved mode of and apparatus for steering and turning vessels." *Letters Patent sealed.*

ABEL. 6th November 1863.

2750. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in fluid meters."—*A communication to him from abroad by Friederich Klingenfeld, of Nürnberg, in the Kingdom of Bavaria, Professor.* *Provisional protection only.*

COATES. 6th November 1863.

2751. CHARLES COATES, of Sunnyside, near Rawtenstall, in the County of Lancaster, Engineer in the employment of Messieurs Butterworth and Brooks, of Sunnyside, aforesaid, for an invention for—"Certain improvements in machinery for printing cotton and other fabrics." *Letters Patent sealed.*

SELLAR. 6th November 1863.

2752. ROBERT SELLAR, of Huntley, Aberdeenshire, North Britain, Agricultural Implement Manufacturer, for an invention for—"An improvement in the construction of harrows." *Letters Patent sealed.*

MUCKART. 6th November 1863.

2753. JOHN MUCKART, of Letham Mill, near Arbroath, in the County of Forfar, North Britain, for an invention for—"Improvements in preserving certain vegetable substances." *Letters Patent sealed.*

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DAVIES. CATE. 6th November 1863.

2754. WILLIAM DAVIES, and GEORGE CATE, both of 151, North Street, Old Road, Stepney, in the County of Middlesex, Cork Cutters, for an invention for—"Improvements in machinery for cutting corks, bungs, gun wads and other similar articles." *Provisional protection only.*

SOUTHALL. HEAP. 6th November 1863.

2755. CHARLES HENRY SOUTHALL, and ROBERT HEAP, of Staleybridge, in the County of Lancaster, for an invention for—"Improvements in self-acting machinery or apparatus worked by steam or other power, for cutting and shaping the soles and heels of boots and shoes, and screwing them on to the uppers or coverings, and also in vices for holding the same, and tools for paring, blacking and glazing or otherwise ornamenting the edges of the soles and heels." *Letters Patent sealed.*

SAUNDERS. 6th November 1863.

2756. ROBERT SAUNDERS, of Croydon, in the County of Surrey, Gentleman, for an invention for—"Improvements in fastening together the parts of ships and vessels, and in respect to the more efficient caulking of the seams thereof." *Provisional protection only.*

GUIRETTE. 6th November 1863.

2757. JOSEPH SEVERIN GUIRETTE, of Paris, in the Empire of France, Doctor of Medicine, for an invention for—"An improved inhaling apparatus." *Provisional protection only.*

TOWNSEND. 6th November 1863.

2758. JOSEPH TOWNSEND, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of nitrate of potash." *Letters Patent sealed.*

NEILSON. 6th November 1863.

2759. WALTER MONTGOMERIE NEILSON, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in axle boxes."—*In part communicated to him from abroad by Eugene Thétard, of Paris, France, and in part invented by himself.* *Letters Patent sealed.*

ALLEN. 6th November 1863.

2760. WILLIAM DANIEL ALLEN, of Laithfield House, Norfolk Road, Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in casting ingots of steel." *Letters Patent sealed.*

CAMPBELL. 6th November 1863.

2761. COLIN MINTON CAMPBELL, of Stoke-upon-Trent, Esquire, for an invention for—"Improvements in apparatus for drying plates and other articles of china and earthenware." *Provisional protection only.*

PERKIN. 6th November 1863.

2762. WILLIAM HENRY PERKIN, of Seymour Villa, Sudbury, in the County of Middlesex, for an invention for—"Improvements in the manufacture of coloring matters suitable for dyeing and printing." *Letters Patent sealed.*

JOHNSON. 6th November 1863.

2763. RICHARD JOHNSON, of Manchester, in the County of Lancaster, Iron and Wire Manufacturer, for an invention for—"Improvements in testing the strength of wire for telegraphic and other purposes." *Letters Patent sealed.*

NEWTON. 6th November 1863.

2764. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Walter Davis Richards, of Boston, in the United States of America.* *Letters Patent sealed.*

EMERY. 7th November 1863.

2765. HORACE LEEMAN EMERY, of No. 72, Sloane Street, Chelsea, in the County of Middlesex, Agricultural Implement Maker, for an invention for—"Improvements in machinery for ginning and cleaning cotton, a part of which are applicable to machines for other purposes." *Letters Patent sealed.*

BARRACLOUGH. 7th November 1863.

2766. THOMAS CRITCHLEY BARRACLOUGH, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in looms for weaving."—*A communication to him from abroad by Wilhelm Gminder, of Reutlingen, in the Kingdom of Wirtemberg.* *Letters Patent sealed.*

BATT. 7th November 1863.

2767. RICHARD BATT, of Waterhouse Mill, Milnthorpe, in the County of Westmoreland, Paper Manufacturer, for an invention for—"Improved arrangements of paper-making machinery." *Provisional protection only.*

HOYT. 7th November 1863.

2768. JEHIEL KEELER HOYT, of the City, County and State of New York, United States, now of No. 12, Southampton Buildings, Chancery Lane, County of Middlesex, for an invention for—"Improvements in revolving fire-arms."—*A communication to him from abroad by Benjamin Franklin Joslyn, of Stonnington, Connecticut, United States of America.* *Complete specification; Letters Patent sealed.*

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JOHNSON.
7th November 1863.

2769. JAMES JOHNSON, of Peterborough, in the County of Northampton, Engineer, for an invention for—"Improvements in apparatus for lubricating the cylinders and other parts of steam-engines." *Letters Patent sealed.*

DYSON.
DYSON.
DYSON.
7th November 1863.

2770. JOHN DYSON, JOSEPH DYSON, and GEORGE WALTER DYSON, all of Tinsley, in the County of York, Ironfounders, for an invention for—"Improvements in the method of and machinery for forming metal plates, bars and rods taper." *Provisional protection only.*

BRAHAM.
7th November 1863.

2771. LEWIS BRAHAM, of Hatton Garden, in the County of Middlesex, Optician, for an invention for—"Improvements in spectacles and hand frames." *Letters Patent sealed.*

CLARK.
7th November 1863.

2772. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improvement in sewing-machines."—*A communication to him from abroad by Jerome Burge Secor and William Henry Butler, both of Chicago, Cook County, State of Illinois, United States of America.* *Letters Patent sealed.*

MELLAND.
7th November 1863.

2773. GEORGE STEPHEN MELLAND, of Lime Street, in the City of London, Gun Manufacturer, for an invention for—"Improvements in breech loading fire-arms and ordnance."—*A communication to him from abroad by Jacob Snider, Junr., now residing at the Hotel de France, Rue de Province, Paris, France.* *Provisional protection only.*

PRINCE.
7th November 1863.

2774. ALEXANDER PRINCE, of 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

BARCLAY.
MORTON.
7th November 1863.

2775. ANDREW BARCLAY, and ALEXANDER MORTON, Engineers, both of Kilmarnock, in the County of Ayr, North Britain, for an invention for—"Improvements in certain apparatus for injecting and ejecting fluids." *Letters Patent sealed.*

ABEL.
7th November 1863.

2776. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for raising and lowering bodies."—*A communication to him from abroad by Friederich Klingenfeld, of Nürnberg, in the Kingdom of Bavaria, Professor.* *Provisional protection only.*

WICKENS.
7th November 1863.

2777. HENRY WICKENS, of Tokenhouse Yard, Bank, in the City of London, Gentleman, for an invention for—"Improvements in lamps for burning oils."—*A communication from Florimond Baudoin, of Chaussée du Maine, Montrouge, in the City of Paris, in the Empire of France.* *Provisional protection* NOT *granted.*

MELLOR.
7th November 1863.

2778. MOSES MELLOR, of the Town and County of the Town of Nottingham, Framesmith and Machine Builder, for an invention for—"Improvements in machinery or apparatus for the manufacture of looped or knitted fabrics." *Letters Patent sealed.*

HASELTINE.
7th November 1863.

2779. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved machine for bending metallic pipes or spouts."—*A communication to him from abroad by the inventors Elijah Valentine and Moses Thompson Ridout, both of Milwaukee, Wisconsin, United States of America.* *Complete specification; Letters Patent sealed.*

COCHRANE.
9th November 1863.

2780. ARTHUR AUCKLAND LEOPOLD PEDRO COCHRANE, of Portsmouth, in the County of Hampshire, Captain in the Royal Navy, for an invention for—"Improvements in propelling and steering ships." *Letters Patent sealed.*

MÈGE.
9th November 1863.

2781. HIPPOLYTE MÈGE, of No. 10, Rue de la Fidélité, Paris, Professor of Chemistry, for an invention for—"Certain improvements in the manufacture of soap." *Letters Patent sealed.*

CUNNINGHAM.
CONNOP.
9th November 1863.

2782. WILLIAM JOHN CUNNINGHAM, and HERBERT CONNOP, both of Everett Terrace, Victoria Dock Road, in the County of Essex, for an invention for—"Improvements in sawing machines." *Letters Patent sealed.*

BOUSFIELD.
9th November 1863.

2783. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the construction of ships and vessels."—*A communication to him from abroad by William Keld Whytehead, a person resident at Asuncion, in the Republic of Paraguay.* *Letters Patent sealed.*

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THOMPSON.
9th November 1863.

2784. NATHAN THOMPSON, of Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in apparatus for stopping bottles and other vessels." *Letters Patent sealed.*

RYDER.
GUTTERIDGE.
9th November 1863.

2785. GEORGE RYDER, of the Church Gate Engine Works, and MATTHEW GUTTERIDGE, of East Street, both in the Borough of Leicester, for an invention for —"Improvements in hay making machines." *Provisional protection only.*

PHILIPSON.
DEES.
9th November 1863.

2786. RALPH HENRY PHILIPSON, Agent, and JOHN DEES, Engineer, both of Cassop, in the County of Durham, for an invention for—"An improved machine adapted for performing various mining operations, such as working or cutting coal or other analogous substances in mines, forcing water from mines, and air thereunto." *Provisional protection only.*

WESTON.
10th November 1863.

2787. THOMAS WESTON, of No. 5, Montague Street, Dublin, for an invention for —"Improvements in printing presses." *Provisional protection only.*

HABICHT.
10th November 1863.

2788. JOHN CONRAD HABICHT, of No. 4, South Street, Finsbury, London, Merchant, for an invention for—"Certain improvements in keyless watches."—*A communication to him from abroad by Messieurs Frederic Parrot and Charles Martin, both of Montbéliard, France.* *Provisional protection only.*

YATES.
10th November 1863.

2789. GEORGE YATES, of Wolverhampton, in the County of Stafford, Mechanic, for an invention for—"Improvements in machinery to be used in the manufacture of heel tips and toe tips and toe plates for boots and shoes." *Letters Patent sealed and specification filed by order.*

RAMSBOTTOM.
10th November 1863.

2790. JOHN RAMSBOTTOM, of Accrington, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for measuring and registering fluids, and in obtaining motive-power from the same." *Letters Patent sealed.*

BARTLETT.
10th November 1863.

2791. SAMUEL JOHN BARTLETT, of Maidstone, in the County of Kent, Watch and Clock Maker, for an invention for—"Improvements in taps." *Letters Patent sealed.*

BONNEVILLE.
10th November 1863.

2792. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, for an invention for—"An improved cowl or chimney pot."—*A communication from Yves Marie Pouliquen, a person residing at Brest, in the Empire of France, aforesaid.* *Letters Patent sealed.*

CASTELNAU.
10th November 1863.

2793. FRANÇOIS CASTELNAU, of Villefranche, Haute Garonne, in the Empire of France, for an invention for—"Improvements in the construction of two wheeled vehicles or carriages." *Provisional protection only.*

MASH.
10th November 1863.

2794. JAMES MASH, of Bowden, in the County of Chester, Engineer, for an invention for—"Improvements applicable to safety valves and pressure or temperature gauges." *Letters Patent sealed.*

FAULKNER.
BERRY.
HARRISON.
10th November 1863.

2795. SAMUEL FAULKNER, of Blackley, in the County of Lancaster, Cotton Spinner, JOHN BERRY, of Newton Heath, in the said County, Gentleman, and GEORGE HARRISON, of Blackley, aforesaid, Mechanic, for an invention for—"Improvements in apparatus for grinding cards used in carding-engines." *Provisional protection only.*

FAULKNER.
10th November 1863.

2796. SAMUEL FAULKNER, of Blackley, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in carding-engines." *Letters Patent sealed.*

CUTLER.
10th November 1863.

2797. JOSEPH CUTLER, of Gloucester Road, Upper Holloway, in the County of Middlesex, for an invention for—"Improvements in the construction of ornamental fountains." *Provisional protection only.*

TESTUZ.
11th November 1863.

2798. FRANÇOIS TESTUZ, of Besançon, in the French Empire, at present residing at No. 11, Air Street, Piccadilly, in the County of Middlesex, for an invention for— "Improvements in breaks applicable to railway and other carriages." *Letters Patent sealed; no specification filed.*

SMITH.
11th November 1863.

2799. JOHN SMITH, of Cheetham, in the City of Manchester, in the County of Lancaster, Dyer and Finisher, for an invention for—"Improvements in machinery for finishing or beetling woven fabrics, which improvements are also applicable to fulling machines." *Letters Patent sealed.*

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BOWDITCH. 11th November 1863.	**2800.** WILLIAM RENWICK BOWDITCH, of Saint Andrew's, Wakefield, in the County of York, Clerk, for an invention for—"Improvements in apparatus used in gas-lighting." *Letters Patent sealed.*
READE. HEWITT. 11th November 1863.	**2801.** THOMAS MELLARD READE, of Liverpool, in the County of Lancaster, Architect, and JOSHUA HEWITT, of Stanley, near Liverpool, aforesaid, Plumber, for an invention for—"Improvements in the apparatus for regulating and controlling the supply of water to water-closets and other purposes." *Letters Patent sealed.*
FOTTRELL. 11th November 1863.	**2802.** JOHN FOTTRELL, of Liverpool, in the County of Lancaster, Merchant and Warehouse Owner, for an invention for—"Improvements in deodorizing petroleum and other mineral oils." *Provisional protection only.*
DAWSON. 11th November 1863.	**2803.** DAN DAWSON, of Milnsbridge Chemical Works, Huddersfield, in the County of York, for an invention for—"Improvements in the production of colours for dyeing." *Letters Patent sealed.*
DURST-WILD. 11th November 1863.	**2804.** ANNE CATHERINE DURST-WILD, Widow, of No. 119, Cheapside, in the City of London, and No. 39, Rue du Caire, Paris, France, for an invention for—"An improved mode of ornamenting hats and bonnets."—*A communication from Valentin Chery, jnnr., of Paris, France.* *Letters Patent sealed.*
MELTON. 11th November 1863.	**2805.** HENRY MELTON, of Regent Street, in the County of Middlesex, Hatter to the Royal Family, for an invention for—"Improvements in shakos, military and other hats and caps." *Provisional protection only.*
RICHARDS. 11th November 1863.	**2806.** WALTER DAVIS RICHARDS, of the City of Boston, in the United States of America, for an invention for—"Improvements in caloric or heated air engines."—*A communication from Henry Messer, a person resident at Roxbury, in the County of Norfolk, and State of Massachusetts, and United States of America.* *Complete specification; Letters Patent sealed.*
STAINTON. LAWSON. 11th November 1863.	**2807.** MATTHEW STAINTON, of South Shields, in the County of Durham, Ironfounder, and DANIEL LAWSON, of South Shields, in the County of Durham, Pattern Maker, for an invention for—"Improvements in apparatus for steering ships and vessels." *Provisional protection only.*
CLISSOLD. 11th November 1863.	**2808.** WILLIAM CLISSOLD, of Dudbridge Works, near Stroud, in the County of Gloucester, Engineer, for an invention for—"Improvements applicable to machinery for opening, cleaning, preparing and carding wool and other fibrous substances." *Provisional protection only.*
HASELTINE. 11th November 1863.	**2809.** GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, County of Middlesex, Civil Engineer, for an invention for—"Improvements in endless chain horse powers."—*A communication to him from abroad by Stuart Perry, of Newport, County of Herkimer, State of New York, United States of America.* *Letters Patent sealed.*
MURRAY. 12th November 1863.	**2810.** BARNABY ANGELO MURRAY, of the City of Manchester, Machinist, for an invention for—"Improvements in machinery for doubling, twisting and winding silk and other fibrous substances." *Letters Patent sealed.*
SIMLICK. 12th November 1863.	**2811.** HENRY JOSEPH SIMLICK, of Old Ford Road, Bow, in the County of Middlesex, for an invention for—"Improvements in the manufacture of fusees or matches employed to light cigars and pipes." *Provisional protection only.*
CRAIG. 12th November 1863.	**2812.** ANDREW CRAIG, of Rock Ferry, Birkenhead, in the County of Chester, Engineer, for an invention for—"Improvements in distilling hydro-carbons from coal shale and other bituminous substances, and in apparatus employed for that purpose." *Provisional protection only.*
PEAKE. 12th November 1863.	**2813.** BENJAMIN PEAKE, of Coventry, in the County of Warwick, Ribbon Manufacturer, for an invention for—"Improvements in the manufacture of neck ties, cravats and waistbands, which improvements are also applicable to other articles of wearing-apparel." *Letters Patent sealed.*
BOOTH. BOOTH. BOOTH. 12th November 1863.	**2814.** JOSEPH BOOTH, JOHN BOOTH, and JEREMIAH BOOTH, of Rodley, near Leeds, in the County of York, Engineers and Copartners, for an invention for—"Improvements in guy cranes and other similar cranes." *Letters Patent sealed.*

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ILLINGWORTH. 12th November 1863.

2815. ALFRED ILLINGWORTH, of Bradford, in the County of York, Spinner, for an invention for—"Improvements in means or apparatus employed in preparing and twisting cotton, wool and other fibrous materials." *Letters Patent sealed.*

HOLDEN. 12th November 1863.

2816. HUGH HOLDEN, of Preston, in the County Palatine of Lancaster, for an invention for—"Improvements in shuttles for weaving." *Letters Patent sealed.*

DAVIES. 12th November 1863.

2817. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in springs for railroad cars and other similar purposes."—*A communication to him from abroad by Augustus Bell Davis, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

ROWLAND. 12th November 1863.

2818. ELLIS ROWLAND, of Manchester, in the County of Lancaster, Engineer for an invention for—"Certain improvements in apparatus for weighing solid bodies and for measuring fluids, parts of which improvements are also applicable to the opening and closing of dampers." *Complete specification; Letters Patent sealed.*

GEDGE. 12th November 1863.

2819. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved process and apparatus for amalgamating the precious metals."—*A communication to him from abroad by Jean Baptiste Baux, Merchant, and Alexis Guiod, Joiner, both of No. 15, Passage des Petites Ecuries, Paris, France.* *Letters Patent sealed.*

FORD. 12th November 1863.

2820. DAVID FORD, of Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in propelling boats and barges." *Letters Patent sealed.*

BROCKBANK. 12th November 1863.

2821. GEORGE HENRY BROCKBANK, of Great College Street, in the County of Middlesex, for an invention for—"Improvements in pianofortes." *Letters Patent sealed.*

MARTIN. 12th November 1863.

2822. LOUIS EMILE CONSTANT MARTIN, of No. 32, Albion Street, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for generating steam." *Letters Patent sealed.*

NEWTON. 12th November 1863.

2823. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in gas-burners."—*A communication to him from abroad by George Washington Thompson and John Thomas Tully, both of New York City, United States of America.* *Letters Patent sealed.*

BETTLE. 12th November 1863.

2824. PHILIP BETTLE, of Ely Place, in the County of Middlesex, Watch Manufacturer, for an invention for—"Improvements in pins, brooches, buckles and other ornaments to be applied to various articles of wearing-apparel." *Provisional protection* NOT *granted.*

FYFE. 12th November 1863.

2825. DOUGLASS MUNRO FYFE, of Maidenhead, in the County of Berks, Adjutant of the 19th Regiment of Berks Volunteers, for an invention for—"Improvements in carriages and apparatus for raising, removing and transporting heavy bodies from place to place." *Letters Patent sealed.*

SIEMENS. 13th November 1863.

2826. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in apparatus for submerging submarine telegraph cables."—*The result partly of a communication made to him from abroad by Werner Siemens, of Berlin, in the Kingdom of Prussia, and partly of an invention and discovery made by himself.* *Provisional protection only.*

MARRIOTT. RADCLIFF. 13th November 1863.

2827. BENJAMIN MARRIOTT, of 38, Upper Street, Islington, and CHARLES RADCLIFF, of 201, Hampstead Road, both in the County of Middlesex, for an invention for—"Improvements in dead beat independent centre seconds watches." *Letters Patent sealed.*

ROBERTSON. 13th November 1863.

2828. WILLIAM ROBERTSON, of the City of Manchester, Engineer, for an invention for—"Certain improvements in machinery for spinning and doubling." *Letters Patent sealed.*

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CHAMBERS. 13th November 1863.

2829. WILLIAM CHAMBERS, of Whitefield, near Manchester, in the County of Lancaster, Bleacher, for an invention for—" Improvements in machinery for beetling and finishing cloth." *Letters Patent sealed.*

REMINGTON. 13th November 1863.

2830. GEORGE REMINGTON, of Haverstock Hill, in the County of Middlesex, Member of the Institution of Civil Engineers, for an invention for—" Improvements in atmospheric or pneumatic railways and locomotive engines to be used in connection therewith." *Provisional protection only.*

HODSON. 13th November 1863.

2831. HARRY FARNCOMBE HODSON, of No. 179, Western Road, Brighton, in the County of Sussex, Agricultural Agent, for an invention for—" Certain improvements in cigars." *Provisional protection only.*

DEARLOVE. 13th November 1863.

2832. WILLIAM FRANCIS DEARLOVE, of 263, Goswell Road, in the County of Middlesex, for an invention for—" Improvements in means or apparatus for effecting the chopping or separation of animal and vegetable substances." *Letters Patent sealed.*

SPENCER. DODD. 13th November 1863.

2833. ELI SPENCER, of Oldham, in the County of Lancaster, Machinist, and JOHN DODD, of the same place, Machinist, for an invention for—" Improvements in mules for spinning and doubling." *Letters Patent sealed.*

DRUMMOND. 13th November 1863.

2834. JOHN WALLACE DRUMMOND, of the City and State of New York, United States of America, for an invention for—" Improvements in looms for weaving." *Letters Patent sealed.*

GEYELIN. 13th November 1863.

2835. GEORGE KENNEDY GEYELIN, Civil Engineer, 17, King Street, Cheapside, City, London, for an invention for—" Improvements in the construction of water-closets." *Letters Patent sealed.*

BOUSFIELD. 13th November 1863.

2836. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—" Improvements in apparatus used when rolling blinds, maps and other articles on rollers."—*A communication to him from abroad by Silas Safford Putnam, a person resident at Dorchester, in the County of Norfolk, and State of Massachusetts, and Harriet Luthera Packer, a person resident at Brooklyn, King's County, in the State of New York, United States of America.* *Letters Patent sealed.*

HARRISON. 13th November 1863.

2837. THOMAS HARRISON, of Tudhoe, near Ferry Hill, in the County of Durham, Mechanical Engineer, for an invention for—" Improvements in machinery for cutting and excavating coal and other minerals, applicable also to other mining purposes." *Letters Patent sealed.*

MUIR. MCILWHAM. 14th November 1863.

2838. MATTHEW ANDREW MUIR, and JAMES MCILWHAM, of Glasgow, in the County of Lanark, North Britain, Machinists, for an invention for—" Improvements in looms for weaving." *Letters Patent sealed.*

MEDWAY. JOYCE. 14th November 1863.

2839. JAMES MEDWAY, and SAMUEL JOYCE, of 15, Owen's Row, in the County of Middlesex, Manufacturing Chemists, for an invention for—" Improvements in the manufacture of starches by the introduction of coloring matters." *Provisional protection only.*

GLADSTONE. 14th November 1863.

2840. HENRY GLADSTONE, of No. 2, Butler's Terrace, Ossory Road, Old Kent Road, in the County of Surrey, Cartridge Manufacturer, for an invention for—" Improvements in the manufacture of skin cartridges." *Letters Patent sealed.*

HUGHES. 14th November 1863.

2841. DE BOSCO HUGHES, of Liverpool, in the County of Lancaster, Scenic Artist, for an invention for—" Improvements in producing dramatic and other like effects on the stage or in a room." *Provisional protection only.*

BINNS. 14th November 1863.

2842. JOSEPH PICKLES BINNS, of Guilford Place, Farringdon Road, in the County of Middlesex, Machinist, for an invention for—" Improvements in sewing-machines." *Provisional protection only.*

ELLISON. 14th November 1863.

2843. JOSEPH ELLISON, of Leeds, in the County of York, for an invention for—" Improvements in flour dressing machines, termed 'silk reels.'" *Provisional protection only.*

WILSON. 14th November 1863.

2844. JOHN CHARLES WILSON, of 14A, Cannon Street, London, County of Middlesex, Civil and Mechanical Engineer, for an invention for—" Improvements in cotton gins on the roller principle." *Provisional protection only.*

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HUGHES. 14th November 1863.

2845. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in apparatus and parts of sewing-machines."—*A communication to him from abroad by Jean Louis Thenen, of La Chapelle St. Denis (Seine), in the Empire of France.* *Letters Patent sealed.*

HARGRAVES. 14th November 1863.

2846. EDWIN HARGRAVES, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in preventing the escape of heat from steam-boilers and other heated surfaces." *Letters Patent sealed.*

ELLISSEN. 14th November 1863.

2847. ADOLF ELLISSEN, of the City of London, Merchant, for an invention for—"Improvements in preventing the fouling of the bottoms and sides of ships and vessels, particularly applicable to ships and vessels constructed of or sheathed with iron." *Letters Patent sealed.*

PRIDEAUX. 14th November 1863.

2848. THOMAS SYMES PRIDEAUX, of 209, Piccadilly, in the County of Middlesex, for an invention for—"Improvements in the construction of armour for ships of war and land batteries." *Letters Patent sealed.*

BARKER. 14th November 1863.

2849. GEORGE BARKER, of 59, Broad Street, Pendleton, in the County of Lancaster, Merchant, for an invention for—"Improvements in the construction of syphons for taking off liquid sewerage, overflow of rivers, and other like purposes." *Letters Patent sealed.*

LYTTLE. 14th November 1863.

2850. WILLIAM ALEXANDER LYTTLE, of No. 5, Priam Place, Albion Road, Hammersmith, London, in the County of Middlesex, Gentleman, for an invention for—"Improved covers for umbrellas, parasols or sunshades." *Provisional protection only.*

COURTNEY. 14th November 1863.

2851. GEORGE HENRY COURTNEY, of Broadway, Stratford, in the County of Essex, for an invention for—"Improvements in tills or receptacles for money." *Provisional protection only.*

NEWTON. 14th November 1863.

2852. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the treatment or manufacture of wrought and cast iron and steel."—*A communication to him from abroad by Marc Antoine Augustin Gaudin, of 45, Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed; no specification filed.*

LINDEMANN. 14th November 1863.

2853. GUSTAV LINDEMANN, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for singeing woven fabrics." *Letters Patent sealed.*

LEWIS. 14th November 1863.

2854. JOHN LEWIS, of Elizabeth, in the County of Essex, and State of New Jersey, United States of America, for an invention for—"Improvements in rudders." *Letters Patent sealed.*

MACKIRDY. 14th November 1863.

2855. LAUCHLAN MACKIRDY, of Greenock, in the County of Renfrew, Sugar Refiner, for an invention for—"Improvements in saturating, washing and cleansing charcoal and other matters, applicable also to the separation of syrups from sugar." *Letters Patent sealed.*

BROOMAN. 14th November 1863.

2856. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in presses for lithographic and other printing."—*A communication to him from abroad by Jean Theodore Dupuy, of Paris, France.* *Letters Patent sealed.*

HARRISON. 14th November 1863.

2857. JAMES HARRISON, of the Town or Borough of Kingston-upon-Hull, in the County of the same Town or Borough, Seed Crusher, for an invention for—"Improvements in mills for cleaning cotton seed." *Provisional protection only.*

BROOMAN. 14th November 1863.

2858. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in engines and boilers specially applicable for agricultural purposes."—*A communication to him from abroad by Jean Baptiste Pierret and André Schweizer, both of Paris, France.* *Letters Patent sealed.*

SOUTHGATE. 14th November 1863.

2859. JOHN SOUTHGATE, of Nos. 75 and 76, Watling Street, in the City of London, for an invention for—"Improvements in overland and other portmanteaus." *Letters Patent sealed; no specification filed.*

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WILLIAMS. NAYLOR. 14th November 1863.

2860. THOMAS WILLIAMS, of No. 232, Bolling Street, Bowling, in the Parish of Bradford, in the County of York, and ISAAC NAYLOR, of No. 13, St. James's Square, in Horton, in the said Parish of Bradford, Worsted Spinners, and carrying on business in copartnership in Bowling and Bradford, aforesaid, for an invention for—"Improvements in paper spools or tubes used in spinning and doubling machines." *Provisional protection only.*

WALMSLEY. 14th November 1863.

2861. JOHN WALMSLEY, of the Town of Berlin, in the County of Waterloo, and Province of Canada, Farmer and Waggon Maker, for an invention for—"Improvements in machinery for pulverizing and cleaning the soil and scattering seed, guano, bone dust and other substances thereon." *Letters Patent sealed.*

HULSE. LAWRENCE. 16th November 1863.

2862. JOSIAH HULSE, and JOSEPH LAWRENCE, both of Willenhall, in the County of Stafford, Wood Turners, for an invention for—"An improved mode of attaching door knobs to their spindles." *Letters Patent sealed.*

LEIGH. LEIGH. 16th November 1863.

2863. EVAN LEIGH, and FREDERICK ALLEN LEIGH, of the City of Manchester, in the County of Lancaster, Mechanical Engineers, for an invention for—"Improvements in the method of driving and feeding cotton gins, and of conveying away the ginned cotton and seeds therefrom." *Letters Patent sealed.*

PENGILLY. 16th November 1863.

2864. CHARLES PENGILLY, of Bodmin, in the County of Cornwall, Mining Engineer, for an invention for—"Improvements in mechanism or apparatus for reducing or pulverizing ores and other substances required to be reduced or pulverized." *Provisional protection only.*

CAMERON. JOHNSTON. 16th November 1863.

2865. SAMUEL CAMERON, Plumber, and WILLIAM JOHNSTON, Metal Merchant, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in taps or valves, in pipe joints, and in the valvular mechanism of waterclosets." *Letters Patent sealed.*

THONGER. 16th November 1863.

2866. GILBERT THONGER, of Birmingham, in the County of Warwick, Chemist, for an invention for—"Improved modes of preventing accidents arising from the sale or use of poisons." *Letters Patent sealed.*

ELMSLIE. 16th November 1863.

2867. EDMUND WALLACE ELMSLIE, of Great Malvern, in the County of Worcester, Architect, for an invention for—"An improved and economical construction of cottages, applicable also to various other descriptions of buildings." *Letters Patent sealed.*

GRIFFITHS. 16th November 1863.

2868. ROBERT GRIFFITHS, of Mornington Road, Regent's Park, in the County of Middlesex, Engineer, for an invention for—"Improvements in propelling ships or other vessels." *Provisional protection only.*

HENRY. POWER. 16th November 1863.

2869. ANDREW POLLOCK HENRY, and RICHARD THRELFALL POWER, both of Liverpool, in the County of Lancaster, Merchants, for an invention for—"An improved method or apparatus for affixing labels on bottles, canisters, and other like articles." *Provisional protection only.*

BOUSFIELD. 16th November 1863.

2870. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of cartridges."—*A communication to him from abroad by Albert Hook, a person resident at New York, United States of America.* *Letters Patent sealed.*

POMÈS. 16th November 1863.

2871. ISIDORE POMÈS, of Condon, France, Gentleman, for an invention for—"An improved hydraulic motor." *Provisional protection only.*

MAURER. 16th November 1863.

2872. JOHANN JACOB MAURER, of Paris, France, Gentleman, for an invention for —"Improvements in towing boats and other vessels." *Provisional protection only.*

SOVEREIGN. 16th November 1863.

2873. LEVI LEMON SOVEREIGN, of 88, Pentonville Road, Islington, Engineer, for an invention for—"An improved agricultural implement for cultivating land and for sowing seed." *Provisional protection only.*

HARRISON. 16th November 1863.

2874. CHARLES WEIGHTMAN HARRISON, of Battersea, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in filters." *Letters Patent sealed.*

BROOMAN. 16th November 1863.

2875. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of salt and in boilers to be fed by salt water."—*A communication to him from abroad by Charles Louis Edouard Lequin, of Nancy, France.* *Provisional protection only.*

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PARSONS.
17th November 1863.

2876. PERCEVAL MOSES PARSONS, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the construction and manufacture of ordnance, parts of which are applicable to small arms." *Letters Patent sealed.*

BURTON.
17th November 1863.

2877. FREDERICK WILLIAM BURTON, of 20, Somerset Place, New North Road, in the County of Middlesex, Ornamental Carver, for an invention for—"Improvements in the construction of music stools, tables and other articles of furniture, and in means of securing such articles to floors." *Provisional protection only.*

COWAN.
17th November 1863.

2878. WILLIAM COWAN, of Edinburgh, in the County of Mid-Lothian, North Britain, Gas Meter Manufacturer, for an invention for—"Improvements in gas meters." *Letters Patent sealed.*

BAKER.
17th November 1863.

2879. VALENTINE BAKER, Lieutenant-Colonel of Her Majesty's 10th Regiment of Hussars, at present stationed at Dublin, for an invention for—"Improvements in breech loading ordnance and in apparatus connected therewith." *Letters Patent sealed; no specification filed.*

BETTELEY.
17th November 1863.

2880. JOSEPH BETTELEY, of Liverpool, in the County of Lancaster, Iron Merchant, for an invention for—"Improvements in sheathing ships and other vessels." *Letters Patent sealed.*

PRATCHITT.
BLAYLOCK.
PRATCHITT.
18th November 1863.

2881. WILLIAM PRATCHITT, JOHN BLAYLOCK, and JOHN PRATCHITT, all of the City of Carlisle, Machinists, for an invention for—"Improvements in and applicable to moveable platforms for railway stations." *Letters Patent sealed.*

KIMPTON.
18th November 1863.

2882. THOMAS CHRISTOPHER KIMPTON, of Market Street, in the City of Manchester, in the County of Lancaster, for an invention for—"An apparatus applicable to time, fare, distance and other tables, almanacs, arithmetical calculations, postal and other boxes." *Letters Patent sealed.*

MAYER.
18th November 1863.

2883. RUDOLPH MAYER, of Birkby, near Huddersfield, in the County of York, Gentleman, for an invention for—"Improvements in breech loading fire-arms and in bayonets and cartridges connected with the same." *Provisional protection only.*

JOHNSON.
18th November 1863.

2884. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rotatory engines." *—A communication to him from abroad by Enrico Fava, of Gênes, in the Kingdom of Italy.* *Complete specification; Letters Patent sealed.*

SIEVIER.
18th November 1863.

2885. ROBERT WILLIAM SIEVIER, of Guilford Street, Russell Square, in the County of Middlesex, for an invention for—"Improvements in jacquard machines." *—A communication to him from abroad by Edouard Maximilien Augustin Rigo, resident at Neuilly, near Paris, and Charles Grognet, resident at Paris, both in the Empire of France.* *Provisional protection only.*

WILLIAMS.
18th November 1863.

2886. WILLIAM MATTIEU WILLIAMS, of Oak Alyn, near Wrexham, in the County of Denbigh, Manufacturer, for an invention for—"Improvements in apparatus for the distillation of coal and peat, and such other substances as are or may be used for the manufacture of solid and liquid volatile hydro-carbons, or for the manufacture of the said hydro-carbons and coke." *Letters Patent sealed.*

COOPER.
18th November 1863.

2887. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in the manufacture of barrels for fire-arms and in machinery to be used in the said manufacture." *Provisional protection only.*

WIGFALL.
JOLLY.
18th November 1863.

2888. WILLIAM WIGFALL, of Sheffield, in the County of York, Brush Manufacturer, and GOTTLIEB JOLLY, of the same place, Brush Maker, for an invention for —"An improved explosive compound to be used in the manufacture of cartridges, and an improved mode of manufacturing cartridges therewith." *Provisional protection only.*

ELDER.
18th November 1863.

2889. JOHN ELDER, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements relating to floating and other docks." *Letters Patent sealed.*

STEWART.
18th November 1863.

2890. JOHN STEWART, of Leigh, in the County of Lancaster, Boiler Maker, for an invention for—"Certain improvements in steam-boilers or generators." *Letters Patent sealed.*

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MACKEW. 18th November 1863.

2891. JAMES MACKEW, of Leicester, Machinist, for an invention for—"Improvements in machinery for making looped fabrics." *Letters Patent sealed.*

NICHOLSON. 18th November 1863.

2892. EDWARD CHAMBERS NICHOLSON, of Fenchurch Street, in the City of London, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of coloring matters suitable for dyeing and printing." *Letters Patent sealed.*

JENNINGS. LAVATER. 18th November 1863.

2893. JOSIAH GEORGE JENNINGS, of Palace Road, Lambeth, in the County of Surrey, Sanitary Engineer, and MANUEL LEOPOLD JONAS LAVATER, of Bath Street, Newgate Street, in the City of London, India-rubber Manufacturer, for an invention for—"Improvements in the manufacture of tubes, rings and cords of india-rubber, and in covering telegraph wires." *Letters Patent sealed.*

HIRZEL. 18th November 1863.

2894. HEINRICH HIRZEL, Doctor of Philosophy and Lecturer on Chemistry and Pharmacy at the University of Leipzig, now residing at the Terminus Hotel, London Bridge, in the Borough of Southwark, and County of Surrey, for an invention for—"Improvements in the manufacture of coloring matters suitable for dyeing and printing." *Letters Patent sealed; no specification filed.*

GRÆME. 18th November 1863.

2895. PATRICK ST. GEORGE GRÆME, of No. 9, Waterloo Place, Pall Mall, in the County of Middlesex, Captain R.A., for an invention for—"Improvements in ships or vessels for war and other purposes." *Provisional protection only.*

ADAMS. 19th November 1863.

2896. WILLIAM BRIDGES ADAMS, of Hollymount, Hampstead, in the County of Middlesex, Engineer, for an invention for—"Improvements in wheels, tires, axles and axle boxes, and modes of applying them." *Letters Patent sealed.*

EGLIN. 19th November 1863.

2897. JOHN EGLIN, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in 'drifts' or tools used for enlarging holes, and in apparatus for making the same." *Letters Patent sealed.*

ELDER. 19th November 1863.

2898. JOHN ELDER, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

SOUTHBY. 19th November 1863.

2899. ANTHONY GAPPER SOUTHBY, of Bulford, in the County of Wilts, Engineer, for an invention for—"Improvements of stills or retorts for the distillation of petroleum or tars from coal or shale or the products thereof." *Provisional protection only.*

BALNY. 19th November 1863.

2900. AUGUSTE BALNY, Florist, of 369, Rue Saint Denis, Paris, France, for an invention for—"An improved method of stopping horses by means of pincers to be attached to bits." *Provisional protection only.*

FRANCIS. 19th November 1863.

2901. ISAAC FRANCIS, of Pen-y-gelli, near Wrexham, in the County of Denbigh, for an invention for—"Improvements in and apparatus for washing, cleaning and separating impurities from small coal, coke, ashes or cinders." *Letters Patent sealed.*

GRAY. 19th November 1863.

2902. WILLIAM HENRY GRAY, of St. Austell's, in the County of Cornwall, Engineer, for an invention for—"Improvements in the construction of blast cylinders and also in the form and method of working the valves of the same." *Provisional protection only.*

KIRKHAM. 19th November 1863.

2903. JOHN KIRKHAM, of Euston Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in the treatment of certain ores of iron." *Letters Patent sealed.*

WALKER. 19th November 1863.

2904. EDMUND WALKER, of London Street, in the City of London, Windlass Manufacturer, for an invention for—"Improvements in windlasses." *Letters Patent sealed.*

COLLYER. 19th November 1863.

2905. JOSEPH COLLYER, of Leman Street, Whitechapel, in the County of Middlesex, Manufacturing Cooper, for an invention for—"Improvements in the mode of and apparatus for stopping or closing orifices in casks and other vessels." *Letters Patent sealed.*

WALKER. WALKER. BROWN. 19th November 1863.

2906. RICHARD WALKER, and JOHN SCHOLES WALKER, both of Bury, in the County of Lancaster, Machinists, and BENJAMIN BROWN, of the same place, Mechanic, for an invention for—"Improvements in machinery for preparing cotton to be spun." *Letters Patent sealed.*

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CHRISTMAS.
19th November 1863.

2907. ELEAZAR CHRISTMAS, of Watford, in the County of Hertford, for an invention for—"Improvements in carriages." *Letters Patent sealed.*

SYMONS.
19th November 1863.

2908. WILLIAM SYMONS, of 17, St. Mark's Crescent, Regent's Park, Philosophical Instrument Maker, for an invention for—"Improvements in the construction and working of railways." *Letters Patent sealed.*

GOOCH.
19th November 1863.

2909. ROBERT GOOCH, of 4, Bridge Street, Westminster, in the County of Middlesex, for an invention for —"Improved wrought iron sheeting piles." *Provisional protection only.*

COLLING.
PINKNEY.
19th November 1863.

2910. JOHN COLLING, and DAVID GULLON PINKNEY, both of Seaham, in the County of Durham, Master Mariners, for an invention for—"Improvements in apparatus for reefing and furling ships' square sails." *Letters Patent sealed.*

HODSON.
19th November 1863.

2911. WILLIAM BENJAMIN HODSON, of Cotton Street, Bow Common, in the County of Middlesex, Metallic Cask Maker, for an invention for—"Improvements in the manufacture of metal drums and cans for holding oils and other fluid matters, and in furnaces used in such manufacture." *Letters Patent sealed.*

RAIT.
WINSBORROW.
20th November 1863.

2912. GEORGE RAIT, of Canal Bridge, Kingsland Road, Managing Director of "The Gas Meter Company," and JOHN WINSBORROW, of 23, Castle Terrace, Pownal Road, Dalston, Foreman of the said Company, both in the County of Middlesex, for an invention for—"Improvements in the construction of dry gas meters and in the means or apparatus employed therein." *Letters Patent sealed.*

SEWARD.
SMITH.
20th November 1863.

2913. JAMES SEWARD, of Clitheroe, in the County of Lancaster, and HENRY SMITH, of Enfield, in the said County, for an invention for—"An improved apparatus for preventing incrustation in steam-boilers." *Letters Patent sealed.*

MARWOOD.
20th November 1863.

2914. EDWARD MARWOOD, of Blackburn, in the County of Lancaster, Cork Manufacturer, for an invention for—"The application of a certain substance or material for covering rollers used in spinning and preparing cotton, wool and other fibrous substances to be spun." *Provisional protection only.*

DOBSON.
BARLOW.
KNOWLES.
20th November 1863.

2915. BENJAMIN DOBSON, and EDWARD BARLOW, both of Bolton, in the County of Lancaster, Machine Makers, and PETER KNOWLES, of the same place, Foreman, for an invention for—"Improvements in machinery for ginning cotton and for opening cotton and other fibrous substances." *Letters Patent sealed.*

PEZOLD.
20th November 1863.

2916. ERNST PEZOLD, of 32A, Greek Street, Soho, in the County of Middlesex, for an invention for—"An improved pipe stick." *Provisional protection only.*

STEVENS.
20th November 1863.

2917. CHARLES STEVENS, of the firm of Stevens and Henderson, of 31, Charing Cross, in the County of Middlesex, Patent Agent, for an invention for—"An improved hoisting and lowering apparatus."—*A communication to him from abroad by Jean Robin and Pierre Dumas, both of No. 18, Rue de l'Echiquier, Paris, in the Empire of France.* *Provisional protection only.*

FERRY.
20th November 1863.

2918. AMAND HYACINTHE FERRY, Merchant, of 2, Rue Ste. Appoline, Paris (Empire of France), for an invention for—"Improvements in making hammers for pianofortes." *Letters Patent sealed.*

HAYS.
20th November 1863.

2919. JOSEPH JUDGE HAYS, of Hitchin, in the County of Hertford, for an invention for—"Improvements in hot air stoves." *Provisional protection only.*

KIRKMAN.
20th November 1863.

2920. GIARDINELLI SPOONER KIRKMAN, of No. 27, Claremont Terrace, Fentiman's Road, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in apparatus used for connecting railway carriages and trucks." *Letters Patent sealed.*

BRINSMEAD.
20th November 1863.

2921. THOMAS BRINSMEAD, of St. Giles-in-the-Wood, near Torrington, in the County of Devon, for an invention for—"Improvements in apparatus for thrashing and reeding wheat and other straw." *Letters Patent sealed.*

MCLAINE.
20th November 1863.

2922. ALEXANDER MCLAINE, of Belfast, in the County of Antrim, Ship Builder, for an invention for—"Improvements in the construction of gun boats, gun vessels and rams." *Provisional protection only.*

FAWCUS.
20th November 1863.

2923. GEORGE FAWCUS, of North Shields, in the County of Northumberland, Shipbuilder, for an invention for—"Improvements in connecting scaling, fire and other like ladders." *Provisional protection only.*

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NEWTON. 20th November 1863.

2924. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of fan blowers for ventilating and other purposes."—*A communication to him from abroad by Milton Nobles, of St. Anthony, in the State of Minnesota, United States of America.* *Letters Patent sealed.*

NEWTON. 20th November 1863.

2925. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the means of and instruments for attaching tags or labels to bales or packages of merchandize."—*A communication to him from abroad by Porter Fitch, of Brooklyn, in the State of New York, United States of America.* *Provisional protection only.*

BONNEVILLE. 20th November 1863.

2926. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for —"Improvements in preserving grain, flour and other similar substances, and in the apparatus connected therewith."—*A communication from Alphonse Louvel, Doctor of Medicine, Officer of the Legion of Honour, a person residing at Saint Denis, near Paris, in the Empire of France, aforesaid.* *Complete specification; Letters Patent sealed.*

JOHNSON. 20th November 1863.

2927. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in steam-engines and in apparatus connected therewith."—*A communication to him from abroad by Richard Bristol, of Chicago, in the County of Cook, and State of Illinois, United States of America.* *Letters Patent sealed.*

WRIGHT. 21st November 1863.

2928. CHARLES EDWARD WRIGHT, of Colville Terrace, Sherwood Street, in the Town and County of the Town of Nottingham, Mercantile Traveller, for an invention for—"Improvements in apparatus for clipping or binding together letters, music and other loose sheets." *Provisional protection only.*

TURNER. 21st November 1863.

2929. THOMAS TURNER, of Glasgow, in the County of Lanark, North Britain, and of Belfast, in the County of Antrim, Ireland, Architect and Civil Engineer, for an invention for—"An improved fire proof floor or roof for buildings, bridges and other structures." *Provisional protection only.*

AYCKBOURN. 21st November 1863.

2930. HUBERT AYCKBOURN, of 4, Symond's Inn, Chancery Lane, in the County of Middlesex, Solicitor, for an invention for—"The collection and cultivation of oyster spawn and brood."—*A communication to him from abroad by Eugene Kemmerer, of St. Martin, Ile de Ré, France, Doctor of Medicine.* *Letters Patent sealed.*

FENTON. 21st November 1863.

2931. FERRAR FENTON, of Camberwell, in the County of Surrey, for an invention for—"Improvements in the treatment of vegetable fibres for the production of paper pulp or half stuff therefrom." *Letters Patent sealed.*

WILLIAMS. 21st November 1863.

2932. WILLIAM WILLIAMS, of Stanley, Liverpool, in the County of Lancaster, Brick-maker, for an invention for—"Improvements in machinery for making bricks and other like articles." *Letters Patent sealed.*

COPE. 21st November 1863.

2933. DAVID COPE, of Liverpool, in the County of Lancaster, Oil Merchant, for an invention for—"Improvements in the manufacture of metallic drums, kegs, casks and like cylindrical packages." *Provisional protection only.*

DE SAINT JEAN. 21st November 1863.

2934. LUDOVIC D'ESTIENNE DE SAINT JEAN, of Aix, in the Empire of France, Gentleman, for an invention for—"An improved apparatus for closing and fastening gates, doors and things of that description." *Provisional protection only.*

FINCH. 21st November 1863.

2935. EDWARD FINCH, of Bridge Works, Chepstow, in the County of Monmouth, for an invention for—"Improvements in constructing the floors of bridges, houses and other buildings." *Letters Patent sealed.*

WATKINS. 21st November 1863.

2936. FRANCIS WATKINS, of the London Works, near Birmingham, in the County of Warwick, for an invention for—"Improvements in machinery for the manufacture of bolts, nuts, spikes and rivets, and also in furnaces for heating blanks to be formed into such articles." *Letters Patent sealed.*

SIMONETON. 21st November 1863.

2937. ANTOINE SIMONETON, Cloths Maker, of 2, Rue Ste. Appoline, Paris, Empire of France, for an invention for—"Improvements in the manufacture of sacks, bags and garments without seam." *Letters Patent sealed.*

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HUMPHREYS. 21st November 1863.

2938. THOMAS HUMPHREYS, of Deptford, in the County of Kent, Firewood Merchant, for an invention for—"An improvement in yarn strings for tying up firewood." *Provisional protection* NOT *granted.*

HAMPER. 21st November 1863.

2939. DOUGLAS WILLIAM HAMPER, of the Borough and County of Newcastle-upon-Tyne, Brewer's Engineer, for an invention for—"Improvements in apparatus for mashing malt for brewing or distilling." *Letters Patent sealed.*

WESTHEAD. 21st November 1863.

2940. MARCUS BROWN WESTHEAD, of Manchester, in the County of Lancaster, Manufacturer and Merchant, for an invention for—"Improvements in adapting or arranging tapes and other such narrow fabrics and threads for use." *Letters Patent sealed.*

STEART. 21st November 1863.

2941. JAMES STEART, of 5, Saint James Road, Bermondsey, in the County of Surrey, Manufacturer, for an invention for—"Extracting the fibre from zostera marina and other aquatic vegetable productions." *Complete specification; Letters Patent sealed.*

BESTWICK. 23rd November 1863.

2942. WILLIAM BESTWICK, of the City of Manchester, in the County of Lancaster, Braid Manufacturer, for an invention for—"Improvements in braiding machines." *Provisional protection only.*

HOWARD. 23rd November 1863.

2943. CHARLES HOWARD, of No. 23, Stanley Terrace, Deptford, in the County of Kent, for an invention for—"An improved watch case pendant applicable also to other articles." *Letters Patent sealed.*

BAWDEN. 23rd November 1863.

2944. PETER BAWDEN, of Queen Street, Cheapside, in the City of London, for an invention for—"Improvements in machinery for making bricks." *Provisional protection only.*

SMITH. 23rd November 1863.

2945. JAMES SMITH, of Liverpool, in the County of Lancaster, Painter, for an invention for—"An improved composition for coating or covering the bottoms of ships." *Letters Patent sealed.*

WILSON. IMRAY. 23rd November 1863.

2946. EDWARD BROWN WILSON, of 10, Strand, in the County of Middlesex, Engineer, and JOHN IMRAY, of 190, Westminster Bridge Road, in the County of Surrey, Engineer, for an invention for—"Improvements in presses." *Letters Patent sealed.*

CARR. 23rd November 1863.

2947. THOMAS CARR, of New Ferry, near Birkenhead, in the County of Chester, Engineer, for an invention for—"Improvements in machinery for amalgamating or intermixing dry, semi-fluid or aqueous materials, and for agitating solids with liquids, for combining, dissolving or washing the same." *Letters Patent sealed.*

PLATT. 23rd November 1863.

2948. JAMES PLATT, of Gloucester, in the County of Gloucester, Engineer, for an invention for—"Improvements in machinery and apparatus for cultivating land." *Letters Patent sealed.*

YAPP. 24th November 1863.

2949. GEORGE WAGSTAFF YAPP, of No. 16, Clement's Inn, in the City of Westminster, for an invention for—"Improvements in the preservation of animal substances."—*A communication to him from abroad by Edouard Gorges, of Croisic, in the Empire of France.* *Letters Patent sealed.*

GREGG. GRAY. 24th November 1863.

2950. ST. GEORGE GREGG, of No. 3, Austin Friars, in the City of London, and THOMAS GRAY, of Mitcham, in the County of Surrey, Bleacher, for an invention for—"The production of thread, cordage and woven textile fabrics from prepared fibre of hemp or any of the plants known of the order or genus 'Cannabis,' and in mixing such prepared fibre with cotton, silk or animal wool." *Complete specification; protection for* SIX *months only.*

REA. 24th November 1863.

2951. DAVIS WILSON REA, of Upper Thames Street, in the City of London, Provision Merchant, for an invention for—"Improvements in preserving animal and vegetable substances." *Letters Patent sealed.*

HOWLETT. 24th November 1863.

2952. WILLIAM HOWLETT, of 16, Cottage Grove, Mile End Road, in the County of Middlesex, Commercial Clerk, for an invention for—"Improvements in printing floor cloths, carpets and similar goods, and in the machinery or apparatus to be employed therein." *Provisional protection only.*

SCHIELE. 24th November 1863.

2953. CHRISTIAN SCHIELE, of Clarence Buildings, in the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in hydraulic apparatus for hoisting, lifting and pressing." *Provisional protection* NOT *granted.*

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DAVIES. 24th November 1863.

2954. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in photography."—*A communication to him from abroad by Mathieu Risler, the younger, of Paris, France, Gentleman.* *Provisional protection only.*

LEWIS. 24th November 1863.

2955. JAMES LEWIS, of No. 5, Wych Street, Strand, in the County of Middlesex, Engineer and Model Maker, for an invention for—"Improvements in driving sewing-machines, which improvements are also applicable for driving other machinery." *Letters Patent sealed.*

JOHNSON. 24th November 1863.

2956. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rotatory engines."—*A communication to him from abroad by Wilhelm Heinrich Christian Voss, of Berlin, in the Kingdom of Prussia, Engineer.* *Letters Patent sealed.*

FURNIVAL. 24th November 1863.

2957. RICHARD FURNIVAL, of the firm of Furnival and Morris, of the City of Manchester, and County of Lancaster, Machinist, for an invention for—"Improvements in braiding machines." *Provisional protection only.*

NEWTON. 24th November 1863.

2958. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for breaking and cleaning flax, hemp and other fibre yielding plants."—*A communication to him from abroad from James Edward Mallory and Gelston Sanford, both of New York City, United States of America.* *Letters Patent sealed.*

NEWTON. 24th November 1863.

2959. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in balloons or aëronautic apparatus."—*A communication to him from abroad by Eugene Godard, of Rue St. Sebastien, Paris, in the Empire of France.* *Provisional protection only.*

SIBERT. 24th November 1863.

2960. JOHN SIBERT, of No. 9, Carter Gate, Nottingham, for an invention for—"Improvements in the manufacture of joined blond and in the machinery employed therein." *Letters Patent sealed.*

TAIT. 24th November 1863.

2961. PETER TAIT, of Limerick, Ireland, for an invention for—"Improvements in apparatus used for pressing and ironing garments." *Letters Patent sealed; no specification filed.*

DABOLL. 24th November 1863.

2962. CELADON LEEDS DABOLL, of New London, Connecticut, United States of America, at present residing at Aldersgate Street, in the City of London, for an invention for—"Improvements in marine fog signals or alarums." *Letters Patent sealed.*

PARKIN. 25th November 1863.

2963. GEORGE PARKIN, of Tryddyn, in the County of Flint, Engineer, for an invention for—"Improvements in apparatus employed in the manufacture of paraffin and other like oils from shale, cannel and other minerals." *Letters Patent sealed.*

WILSON. 25th November 1863.

2964. THOMAS WILSON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in presses for cutting, perforating and shaping metals." *Provisional protection only.*

POWER. 25th November 1863.

2965. MATTHEW POWER, of the City of Worcester, Head Constable of City Police, for an invention for—"Improvements in fire-escapes." *Provisional protection only.*

BEVAN. 25th November 1863.

2966. EDWARD BEVAN, of No. 29, Argyle Street, Birkenhead, in the County of Chester, Watch and Clock Manufacturer, for an invention for—"The manufacture and application of gasses to aid in the lighting of railway carriages separately or conjointly, omnibuses or other carriages, ships, steam boats or other such like vessels, lighthouses or other places where portable gas apparatus may be required." *Provisional protection* NOT *granted.*

ACCARAIN. 25th November 1863.

2967. LOUIS ACCARAIN, of Mons, in the Kingdom of Belgium, and 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of paper, thread, cordage and fabrics, from beetroot." *Letters Patent sealed.*

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WILSON.
25th November 1863.

2968. JOHN HAYS WILSON, of the firm of John Hays Wilson and Company, of Liverpool, in the County of Lancaster, Brass Founders and Ships' Ironmongers, for an invention for—"Improvements applicable to ships' and other lift pumps."
Letters Patent sealed.

BARLOW.
26th November 1863.

2969. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Certain improvements in looms for weaving."—*A communication to him from abroad by Messieurs Auguste Vidal and Sons, and Messieurs Blaquière Brothers, of Paris, in the Empire of France.* *Letters Patent sealed.*

KIRKALDY.
26th November 1863.

2970. DAVID KIRKALDY, of Glasgow, in the County of Lanark, North Britain, Engineer and Draughtsman, for an invention for—"Improvements in testing or measuring the strength and other properties of various materials and structures, and in apparatus therefor."
Letters Patent sealed.

LAMING.
26th November 1863.

2971. RICHARD LAMING, Priory Road, Kilburn, West Hampstead, Middlesex, for an invention for—"Improvements in preparing materials useful in the purifying of gas from sulphuretted hydrogen, carbonic acid and ammonia, and in making ammoniacal compounds."
Letters Patent sealed.

THORPE.
26th November 1863.

2972. JOHN THORPE, of Whittle's Croft, London Road, City of Manchester, County of Lancaster, Manufacturer, for an invention for—"Improvements in the mode of marking patterns or designs upon gored and straight skirts and skirtings, to serve as a guide for sewing and embroidering thereon."
Letters Patent sealed.

SIMMONDS.
26th November 1863.

2973. JAMES SIMMONDS, of Holland Street, Clapham Road, in the County of Surrey, Plumber, for an invention for—"Improvements in stink traps for water-closets, sinks and other purposes."
Letters Patent sealed.

BAKER.
26th November 1863.

2974. JAMES BAKER, of Temple Street, Whitefriars, in the City of London, for an invention for—"Improvements in compositions applicable to the coating of ships' bottoms."
Letters Patent sealed.

NADAL.
26th November 1863.

2975. JEAN NADAL, of No. 14, Brookes Market, Brooke Street, Holborn, in the City of London, for an invention for—"Improvements in apparatus for raising and forcing fluids."
Letters Patent sealed.

JARVIS.
26th November 1863.

2976. JOHN STEPHEN JARVIS, one of the Managers for Dent, Allcroft, Lycett and Company, of Wood Street, in the City of London, Warehousemen, for an invention for—"An improved shirt collar."
Provisional protection only.

CHESTERMAN.
26th November 1863.

2977. JAMES CHESTERMAN, of Sheffield, in the County of York, Manufacturer, for an invention for—"Improvements in frames for umbrellas and other like articles, and petticoats or skirts."
Letters Patent sealed.

MAIN.
27th November 1863.

2978. JAMES ANDREW RAMSAY MAIN, of No. 5, Renfield Street, Glasgow, in the County of Lanark (N.B.), Gentleman, for an invention for—"Improvements in the mode of connecting and sustaining the intersecting bars of iron fences, hurdles, gates and other analogous structures."
Letters Patent sealed.

BROCKLEHURST.
CREIGHTON.
CREIGHTON.
27th November 1863.

2979. WILLIAM COARE BROCKLEHURST, of Macclesfield, in the County of Chester, Silk Manufacturer, JOSEPH CREIGHTON, and JOHN CREIGHTON, both of Manchester, in the County of Lancaster, Machinists, for an invention for—"Certain improvements in machinery or apparatus for winding yarns or threads."
Letters Patent sealed.

GRAY.
27th November 1863.

2980. THOMAS GRAY, of Mitcham, in the County of Surrey, Bleacher, for an invention for—"A new method of discharging color from rags used for paper making or other purposes, and in treating of vegetable fibres by such process."
Letters Patent sealed.

PAGE.
27th November 1863.

2981. FREDERIC PAGE, of Birmingham, in the County of Warwick, Bank Accountant, for an invention for—"Improvements in furnaces and apparatus for the manufacture of volatile hydro-carbons, which improvements are also in part applicable to furnaces and apparatus for the manufacture of illuminating gas."
Letters Patent sealed.

BATEMAN.
BATEMAN.
27th November 1863.

2982. JAMES BATEMAN, and DANIEL BATEMAN, all of Bradford, in the County of York, for an invention for—"Improvements in sewing-machines."
Letters Patent sealed.

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CRABTREE.
27th November 1863.

2983. CHARLES CRABTREE, of Bingley, in the County of York, Spool Tube Manufacturer, for an invention for—"Improvements in the manufacture of paper spool tubes." *Provisional protection only.*

CLARK.
27th November 1863.

2984. JAMES CLARK, of the City of Manchester, in the County of Lancaster, Air-proof and Water-proof Fabric Manufacturer, for an invention for—"Improvements in looms for weaving elastic fabrics." *Provisional protection only.*

CLARK.
27th November 1863.

2985. JAMES CLARK, of the City of Manchester, in the County of Lancaster, Air-proof and Water-proof Fabric Manufacturer, for an invention for—"Improvements in machinery or apparatus for cutting strips or threads of india-rubber or other materials." *Letters Patent sealed.*

GARDNER.
27th November 1863.

2986. EDWARD GARDNER, of the City of Manchester, in the County of Lancaster, Loom Maker and Machinist, for an invention for—"Improvements in looms for weaving elastic fabrics." *Provisional protection only.*

HIRZEL.
27th November 1863.

2987. HEINRICH HIRZEL, Doctor of Philosophy and Lecturer on Chemistry and Pharmacy at the University of Leipzig, now residing at the Terminus Hotel, London Bridge, in the Borough of Southwark, and County of Surrey, for an invention for—"Improvements in extracting essences and perfumes, and also oils and fats from matters containing them, also in bleaching and purifying oils and fats, and in apparatus employed therein." *Letters Patent sealed.*

SMITH.
SMITH.
27th November 1863.

2988. SAMUEL SMITH, and THOMAS SMITH, of No. 5, Fell Street, in the City of London, Wholesale Confectioners, for an invention for—"Improvements in composition or means for the purpose of destroying insects by fumigation, and in means or apparatus employed therewith." *Letters Patent sealed.*

GASKELL.
27th November 1863.

2989. PETER GASKELL, of Walsall Road, Birmingham, for an invention for—"Improvements in tell-tales or indicators for cabs and such like public vehicles." *Letters Patent sealed.*

BEVAN.
WEARE.
28th November 1863.

2990. EDWARD BEVAN, and WILLIAM SYDNEY WEARE, of Birkenhead, in the County of Chester, Watch Manufacturers and Copartners, for an invention for—"Improvements in and applicable to watches to obtain or produce independent centre seconds." *Letters Patent sealed.*

CORDON.
28th November 1863.

2991. CHARLES CORDON, of Nottingham, Plumber, for an invention for—"Improvements in means or apparatus for supplying water to water-closets and urinals." *Provisional protection only.*

IRONMONGER.
28th November 1863.

2992. ELI IRONMONGER, of No. 1, Friar Gate, Derby, in the County of Derby, Auctioneer, Upholsterer and Furniture Dealer, for an invention for—"Improvements in the means of fitting together or connecting articles or parts of articles." *Provisional protection only.*

LANE.
28th November 1863.

2993. THOMAS LANE, of Cirencester, in the County of Gloucester, Implement Maker, for an invention for—"Improvements in chaff-cutting machinery." *Provisional protection only.*

ETIENNE.
30th November 1863.

2994. ANDRÉ ETIENNE, of Great Portland Street, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in the construction of carriages and vehicles and of wheels applicable thereto." *Provisional protection only.*

ALBINI.
30th November 1863.

2995. AUGUSTO ALBINI, of Genoa, but now residing at Birmingham, in the County of Warwick, Captain in the Italian Navy, for an invention for—"Improvements in ships of war and in arming ships of war." *Provisional protection only.*

THOMPSON.
THOMPSON.
LATHAM.
30th November 1863.

2996. GEORGE APDAIL THOMPSON, the elder, GEORGE APDAIL THOMPSON, the younger, Upholsterers, and JOHN LATHAM, Patent Lock Maker, all of Birmingham, in the County of Warwick, for an invention for—"Improvements in the manufacture of door springs, part of which said improvements are applicable to the manufacture of weighing-machines, steelyards, scale-beams and other articles of like nature." *Letters Patent sealed.*

CAMPION.
WILSON.
WILSON.
30th November 1863.

2997. WILLIAM CAMPION, and GEORGE WILSON, both of the Town and County of the Town of Nottingham, Machine Builders, and ALFRED WILSON, also of the same Town, Hosiery Manufacturer, for an invention for—"A new or improved self-acting time register." *Provisional protection only.*

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PILON.
30th November 1863.

2998. MARTIN REGUL PILON, Citizen of the United States, residing at Aguascalientes, Mexico, for an invention for—"Improvements in fire-arms."
Complete specification; Letters Patent sealed.

CHALMERS.
30th November 1863.

2999. JAMES CHALMERS, of 5, Wellington Road, Kentish Town, for an invention for—"Improvements in guns and gun projectiles." *Provisional protection only.*

JAMES.
30th November 1863.

3000. ENOCH WATKIN JAMES, of Brynllys, near Aberystwyth, in the County of Cardigan, for an invention for—"Improved apparatus for drilling or boring rock and other earthy substances, for exploring and other purposes."
Letters Patent sealed.

FERNIE.
TAYLOR.
30th November 1863.

3001. JOHN FERNIE, of Derby, in the County of Derby, Engineer, and GEORGE TAYLOR, of Leeds, in the County of York, Iron Master, for an invention for—"Improvements in machinery for shaping the edges of boiler and other plates."
Letters Patent sealed.

OLLIS.
30th November 1863.

3002. JOHN MATTHIAS OLLIS, of Plymouth, in the County of Devon, Chief Engineer in the Royal Navy, for an invention for—"Improvements in apparatus for obtaining fresh water from sea water." *Provisional protection only.*

PONTIFEX.
30th November 1863.

3003. CHARLES PONTIFEX, of Saint Paul's Road, Islington, and of Shoe Lane, Holborn, both in the County of Middlesex, Vat and Back Maker and Patent Refrigerator Manufacturer, for an invention for—"Improvements in the construction of sluice and other cocks or valves, and in the means of connecting them and the ends of flexible hose pipes together." *Letters Patent sealed.*

BLUNDON.
BLUNDON.
30th November 1863.

3004. JOHN EDWARD BLUNDON, and EDWARD HENRY BLUNDON, both of Fleet Street, in the City of London, Portmanteau and Travelling-bag Manufacturers, for an invention for—"Improvements in the construction of letter, tourist, despatch, and other similar bags or receptacles." *Provisional protection only.*

BOXER.
1st December 1863.

3005. EDWARD MOUNIER BOXER, of the Royal Arsenal, Woolwich, in the County of Kent, Lieutenant-Colonel Royal Artillery, for an invention for—"Improvements in fuzes and shells for ordnance." *Letters Patent sealed.*

WILDE.
1st December 1863.

3006. HENRY WILDE, of the City of Manchester, Engineer, for an invention for—"Improvements in the construction and working of electric telegraphs, and in apparatus connected therewith, partly applicable to other purposes."
Letters Patent sealed; specification filed by order.

GARDINER.
1st December 1863.

3007. PERRY GREEN GARDINER, of the City of New York, in the County and State of New York, United States of America, for an invention for—"Improvements in railroad car springs." *Letters Patent sealed.*

BRAILSFORD.
1st December 1863.

3008. RICHARD BRAILSFORD, of Knowsley, in the County of Lancaster, Trainer of Dogs, for an invention for—"Improvements in the construction of vermin traps."
Provisional protection only.

JONES.
1st December 1863.

3009. BENJAMIN JONES, of Warrington, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in separating sulphur from alkali waste." *Provisional protection only.*

DODDRELL.
1st December 1863.

3010. GEORGE JOHN DODDRELL, of Glasgow, in the County of Lanark, North Britain, Sugar Refiner, for an invention for—"Improvements relating to the manufacture or refining of sugar." *Letters Patent sealed.*

GEDGE.
1st December 1863.

3011. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved plough."—*A communication to him from abroad by Jean André Isidore Pharisier, of Puy, France.* *Provisional protection only.*

REDMAN.
MARTIN.
1st December 1863.

3012. JESSE GUSTAVUS REDMAN, and GEORGE MARTIN, both of Brompton, in the County of Kent, for an invention for—"Improvements in compounds or compositions for coating or covering iron or wooden ships and vessels, metallic sheathing, telegraph cables and other objects, to preserve them from decay, fouling or other destructive action." *Letters Patent sealed.*

LUMLEY.
1st December 1863.

3013. HENRY LUMLEY, of Chancery Lane, in the County of Middlesex, Associate of the Institution of Naval Architects, for an invention for—"Improvements in apparatus for steering." *Letters Patent sealed.*

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TURNBULL.
1st December 1863.

3014. ROBERT TURNBULL, of Portsmouth, in the County of Hants, Shipbuilder, for an invention for—"Improvements in sheathing iron vessels and armour plated ships." *Letters Patent sealed.*

CLARK.
1st December 1863.

3015. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for lighting and heating."—*A communication to him from abroad by Bernard Subre, Professor of Mathematics, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

INGLEFIELD.
1st December 1863.

3016. EDWARD AUGUSTUS INGLEFIELD, of Her Majesty's Ship "Majestic," now lying off Rock Ferry, Cheshire, Captain in the Royal Navy, F.R.S., and F.R.G.S., for an invention for—"Improvements in apparatus for mounting and working guns used in ships and other floating vessels and in fortifications." *Letters Patent sealed.*

GLOVER.
1st December 1863.

3017. GEORGE GLOVER, of the Ranelagh Works, Ranelagh Road, Pimlico, in the County of Middlesex, for an invention for—"Improvements in dry gas meters." *Letters Patent sealed.*

THOM.
1st December 1863.

3018. JAMES THOM, of Hull, in the County of the Town or Borough of Kingston-upon-Hull, Mechanic, for an invention for—"Improvements in apparatus to be employed in expressing oils and fatty matters." *Letters Patent sealed.*

MALLINSON.
1st December 1863.

3019. THOMAS MALLINSON, of the firm of Fleming, Mallinson and Company, of the Globe Works, Manchester, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in certain self-acting mules for spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

COCHRAN.
1st December 1863.

3020. SAMUEL BEACH COCHRAN, of 9, Catherina Terrace, Lansdowne Road, Clapham Road, Machinist, for an invention for—"Improvements in sewing-machines and in apparatus connected therewith." *Provisional protection only.*

MACFARLANE.
2nd December 1863.

3021. GEORGE MACFARLANE, of Draycott Street, Chelsea, in the County of Middlesex, Professor of Music, for an invention for—"A new and improved ink regulator and indicator." *Letters Patent sealed.*

LUBLINSKI.
2nd December 1863.

3022. ROBERT LUBLINSKI, of 183 and 185, City Road, in the County of Middlesex, Stick Manufacturer, for an invention for—"A new method of bending the reverse ends of partridge canes and bending partridge canes without roots." *Provisional protection only.*

WILSON.
2nd December 1863.

3023. WILLIAM WILSON, of the City of Manchester, in the County of Lancaster, Ironmonger, for an invention for—"Improvements in generating gas for illuminating and other purposes, when made by passing atmospheric air over or through volatile oils, and treating such gas and the gas made from coal or cannel after leaving the generators, so as to improve the heating and illuminating qualities thereof, and in the apparatus for effecting the same." *Letters Patent sealed.*

SNOOK.
2nd December 1863.

3024. THOMAS SNOOK, of 25, Wilson Street, Stockport Road, Manchester, in the County of Lancaster, for an invention for—"An improved apparatus for causing a stronger and better draught or current of air, so that house fires may be lighted or kindled in a very short space of time, for effecting a very considerable saving in fuel, and for throwing the heat from such fire into the building or room." *Letters Patent sealed.*

DALES.
2nd December 1863.

3025. JOHN DALES, of New Inn, Strand, in the County of Middlesex, Engineer, for an invention for—"Improvements in fitting moveable or travelling frames and surfaces." *Letters Patent sealed.*

CAPPER.
2nd December 1863.

3026. JASPER CAPPER, of Waterloo, near Liverpool, in the County of Lancaster, Accountant, for an invention for—"Improved apparatus for curing smoky chimnies and preventing down draughts therein." *Provisional protection only.*

HALEY.
BINGHAM.
WEBSTER.
2nd December 1863.

3027. ALFRED WILLIAM HALEY, and ARTHUR BINGHAM, of the City of Manchester, in the County of Lancaster, Engineers and Machinists, and RICHARDSON WEBSTER, of the same place, Mechanic, for an invention for—"Improvements in machinery or apparatus for making envelopes and other similar purposes." *Provisional protection only.*

ENGLAND.
2nd December 1863.

3028. THOMAS THORNBER ENGLAND, of Colne, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in lubricating the shafts of the conducting pulleys of mules, which improvements are also applicable to machinery in general." *Letters Patent sealed.*

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HOLDREGE.
2nd December 1863.

3029. HENRY HOLDREGE, Engineer, of Irvington, State of New York, United States of America, for an invention for—"Improvements in the process and manner of making gas for illuminating, heating and other purposes, a part of which may also be applied to the production of metallic oxydes."—*A communication from William Henry Gwynne, a person resident at the City and State of New York, United States, aforesaid.* *Letters Patent sealed.*

TROTMAN.
2nd December 1863.

3030. SANDERS TROTMAN, of No. 11, Albert Street, Camden Town, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of soap." *Letters Patent sealed.*

HARPER.
2nd December 1863.

3031. JOHN HARPER, of the City and County of Aberdeen, North Britain, Fence Maker, for an invention for—"Improvements in pillars and apparatus for straining wire." *Letters Patent sealed.*

CLIFTON.
2nd December 1863.

3032. RICHARD LUMLEY CLIFTON, of Timberland, near Sleaford, in the County of Lincoln, for an invention for—"Improvements in apparatus used for brewing." *Provisional protection only.*

CUTLER.
2nd December 1863.

3033. JOSEPH CUTLER, of Gloucester Road, Upper Holloway, in the County of Middlesex, for an invention for—"Improvements in apparatus for lighting and ventilating." *Provisional protection only.*

HARRISON.
2nd December 1863.

3034. THOMAS HARRISON, of Pudhoe, near Ferry Hill, in the County of Durham, Mechanical Engineer, for an invention for—"Improvements in machinery for cutting coal and other minerals and stones." *Letters Patent sealed.*

CUNNINGHAM.
2nd December 1863.

3035. HENRY DUNCAN PRESTON CUNNINGHAM, of Bury Alverstoke, in the County of Hants, Esquire, for an invention for—"Improvements in reefing and furling topsails, topgallant sails and royals." *Letters Patent sealed.*

LUNGLEY.
2nd December 1863.

3036. CHARLES LUNGLEY, of Deptford, in the County of Kent, Ship Builder, for an invention for—"Improvements in the construction of ships of war and other vessels." *Letters Patent sealed.*

BROOMAN.
2nd December 1863.

3037. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the distillation or treatment of bituminous substances."—*A communication to him from abroad by John Saunders, of New York, United States of America.* *Letters Patent sealed.*

CAMMELL.
CROMPTON.
2nd December 1863.

3038. CHARLES CAMMELL, of Sheffield, in the County of York, Steel Manufacturer, and WILLOUGHBY CROMPTON, of Openshaw, in the County of Lancaster, Mechanic and Smith, for an invention for—"Improved railway crossings adapted to the ordinary single or double headed rails." *Letters Patent sealed.*

NEWTON.
2nd December 1863.

3039. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in printing machinery."—*A communication to him from abroad by Stephen Davis Tucker, of New York City, United States of America.* *Letters Patent sealed.*

KNOWLES.
3rd December 1863.

3040. THOMAS KNOWLES, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in the manufacture of rollers or cylinders used by calico printers, which improvements are also applicable to other purposes." *Letters Patent sealed.*

GREEN.
3rd December 1863.

3041. JOHN GREEN, of Greenwich, in the County of Kent, Veterinary Surgeon, for an invention for—"Improvements in horse shoes." *Provisional protection only.*

HULETT.
3rd December 1863.

3042. DAVID HULETT, of High Holborn, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in gas stoves for heating irons and other purposes, and in the construction of irons to be heated and used therewith." *Letters Patent sealed.*

STEVENS.
3rd December 1863.

3043. EBENEZER STEVENS, of No. 4, Warwick Villas, Canonbury, in the County of Middlesex, for an invention for—"Improvements in apparatus used when cooking." *Letters Patent sealed.*

BOWRON.
ROBINSON.
3rd December 1863.

3044. JAMES BOWRON, of South Stockton, in the County of York, Glass Manufacturer, and GEORGE ROBINSON, of Welbeck Street, Cavendish Square, in the County of Middlesex, M.D., for an invention for—"Improvements in the manufacture of soda and sulphuric acid." *Letters Patent sealed.*

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HUGHES.
4th December 1863.

3045. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in the process or processes of producing aniline black on cotton fabrics or yarns."—*A communication to him from abroad by Honoré Cordillot, of Dornach, near Mulhouse, in the Empire of France, Chemist.* *Provisional protection only.*

ROBBINS.
4th December 1863.

3046. JOHN ROBBINS, of 372, Oxford Street, in the County of Middlesex, Operative Chemist, for an invention for—"Improved methods of obtaining oxygen gas." *Letters Patent sealed.*

RILEY.
4th December 1863.

3047. ROBERT RILEY, of Sharples, near Bolton, in the County of Lancaster, Manager, for an invention for—"Certain improvements in carding-engines." *Letters Patent sealed.*

CORBETT.
4th December 1863.

3048. JOHN CORBETT, of the City of Carlisle, in the County of Cumberland, Whitesmith and Hot Water Apparatus Manufacturer, for an invention for—"A combined hot water and hot air stove." *Provisional protection only.*

WILLIAMSON.
4th December 1863.

3049. WELBURN WILLIAMSON, of 133, High Holborn, in the County of Middlesex, Mechanical Engineer, for an invention for—"Improvements in wringing machines." *Letters Patent sealed and specification filed by order.*

GREEN.
4th December 1863.

3050. JOHN GREEN, of Newtown Farm, in the Parish of St. Martin, in the County of Worcester, Agriculturist, for an invention for—"Improvements in the construction of harrows, cultivators, and ploughs." *Provisional protection only.*

BROOMAN.
4th December 1863.

3051. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in working railway breaks."—*A communication to him from abroad by Donald Bethune, of Port Hope, Canada.* *Letters Patent sealed.*

HORNSBY.
4th December 1863.

3052. RICHARD HORNSBY, junior, of Spittlegate Iron Works, Grantham, in the County of Lincoln, for an invention for—"Improvements in machinery for thrashing and screening wheat and other grain." *Letters Patent sealed.*

DOUGLAS.
4th December 1863.

3053. THOMAS DOUGLAS, of South Audley Street, Grosvenor Square, in the County of Middlesex, for an invention for—"Improvements in the construction of combs for the human hair." *Provisional protection only.*

HORNSBY.
PHILLIPS.
4th December 1863.

3054. RICHARD HORNSBY, junior, and JAMES EDWIN PHILLIPS, both of Spittlegate Iron Works, Grantham, in the County of Lincoln, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

VARLEY.
VARLEY.
5th December 1863.

3055. SAMUEL ALFRED VARLEY, of 66, Roman Road, Islington, in the County of Middlesex, and CROMWELL FLEETWOOD VARLEY, of Beckenham, in the County of Kent, for an invention for—"Improvements in heating, parts of the invention being applicable to other purposes." *Provisional protection only.*

CONLONG.
5th December 1863.

3056. JAMES CONLONG, of Belfast, in the County of Antrim, Ireland, Manager, for an invention for—"Improvements in machinery or apparatus for opening, cleaning and preparing cotton and other fibrous materials to be spun." *Letters Patent sealed.*

GORMAN.
PATON.
5th December 1863.

3057. WILLIAM GORMAN, and JOHN PATON, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in obtaining and applying heat and in apparatus therefor, being also in part applicable for lighting." *Letters Patent sealed.*

WILSON.
5th December 1863.

3058. GEORGE WILSON, of Glasgow, in the County of Lanark, North Britain, Powerloom Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

BONNEVILLE.
5th December 1863.

3059. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in fret saws."—*A communication from Louis Pierre Nouvel, the younger, Merchant, a person residing at Nantes, in the Empire of France, aforesaid.* *Complete specification; Letters Patent sealed.*

SMITH.
5th December 1863.

3060. SYDNEY SMITH, of the Hyson Green Brass Works, near Nottingham, for an invention for—"Improvements in hydraulic pressure gauges suitable for measuring the pressure in the cylinders of hydraulic presses." *Letters Patent sealed.*

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WALTHEW. 5th December 1863.	**3061.** FREDERICK JAMES WALTHEW, of Westfield Place, Surbiton, in the County of Surrey, Esquire, for an invention for—"Improvements in apparatus for sustaining and lifting draught horses to prevent them falling or injuring the vehicle to which they are attached." *Provisional protection only.*
JOHNSON. 5th December 1863.	**3062.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in washing textile fabrics and in the machinery or apparatus employed therein."—*A communication to him from abroad by Madame Rosine Saiglan Baynères, of Paris, in the Empire of France.* *Letters Patent sealed.*
WANKLYN. 5th December 1863.	**3063.** JAMES ALFRED WANKLYN, of the London Institution, Finsbury, in the County of Middlesex, Chemist, for an invention for—"Improvements in the production and manufacture of certain yellow and orange colors."—*A communication to him from abroad by Eugen Lucius, of Hoechst on the Main, Germany.* *Provisional protection only.*
HALLET. WHITE. 7th December 1863.	**3064.** JOHN FORD HALLET, of Old Compton Street, Soho, Licensed Victualler, and THOMAS LOYNES WHITE, of Litchfield Street, Soho, Carpenter, for an invention for—"An improved apparatus for checking cash taking at intervals." *Provisional protection only.*
ASPINALL. 7th December 1863.	**3065.** ALFRED JOHNSON ASPINALL, of Tue-Brook, near Liverpool, in the County of Lancaster, for an invention for—"An improved hand stamp or seal for marking or impressing consecutive numbers or figures." *Letters Patent sealed.*
FIRTH. FIRTH. STURGEON. 7th December 1863.	**3066.** WILLIAM FIRTH, of Burley, near Leeds, in the County of York, Merchant, SAMUEL FIRTH, of the same place, Gentleman, and JOHN STURGEON, of Leeds, aforesaid, Consulting Engineer, for an invention for—"Certain improvements in machinery for cutting and boring coal, stone or other minerals." *Letters Patent sealed.*
ANTILL. WILKINSON. 7th December 1863.	**3067.** ALFRED ANTILL, and WILLIAM WILKINSON, both of Birmingham, in the County of Warwick, Jewellers, for an invention for—"An improved mode of manufacturing joints and catches for brooches and other articles of jewellery." *Letters Patent sealed.*
SIMPSON. 7th December 1863.	**3068.** JOHN HAWKINS SIMPSON, of Kilmeena, Westport, in the County of Mayo, Ireland, for an invention for—"Improvements in the manufacture of boots and shoes." *Provisional protection only.*
PIERCY. 7th December 1863.	**3069.** FREDERICK PIERCY, of Glenadon House, Dartmouth, in the County of Devon, Artist, for an invention for—"Improvements in the application of heat to water and other fluids, and in apparatus for the same." *Provisional protection only.*
BROOMAN. 7th December 1863.	**3070.** RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in crinoline or hooped skirts."—*A communication to him from abroad by Edme Ferdinand Evrus, of Paris, France.* *Provisional protection only.*
TURNOR. 7th December 1863.	**3071.** MICHAEL TURNOR, of Birmingham, in the County of Warwick, Metallic Pin Manufacturer, for an invention for—"Improvements in pencil cases and holders for crayons and other marking, writing or drawing materials, and in boxes for holding leads for pencils, crayons and other articles." *Letters Patent sealed.*
RICHARDS. WILLETTS. 7th December 1863.	**3072.** ROWLAND RICHARDS, of Birmingham, in the County of Warwick, Gun Manufacturer, and SAMUEL CLEMENT WILLETTS, of Birmingham, aforesaid, Gun Action Filer, for an invention for—"Improvements in breech loading fire-arms." *Provisional protection only.*
TILLING. PARK. 7th December 1863.	**3073.** GEORGE ROBERT TILLING, of Birkenhead, in the County of Chester, Millwright, and JOHN PARK, of Liverpool, in the County of Lancaster, Die and Seal Engraver, for an invention for—"Improvements in steering gear for ships and other vessels." *Letters Patent sealed.*
CLIFTON. 7th December 1863.	**3074.** EDWARD CLIFTON, of Bradford, in the County of York, Ironmonger, for an invention for—"Improvements in or applicable to machinery for preparing and combing wool and other fibrous substances." *Provisional protection only.*
BATE. 7th December 1863.	**3075.** THOMAS BATE, of Saint George's Terrace, Kilburn, in the County of Middlesex, Grocer, for an invention for—"Improvements in receptacles for containing biscuits, fruits and other articles." *Provisional protection only.*

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PAGE. 7th December 1863.

3076. WILLIAM CHARLES PAGE, of Millwall, Poplar, in the County of Middlesex, Engine Driver, for an invention for—"Improvements in preventing the incrustation of steam-boilers and removing incrustation therefrom when formed."
Letters Patent sealed.

BROWN. 7th December 1863.

3077. CHARLES BROWN, of Leicester, Mechanic, for an invention for—"An improved manufacture of elastic bands applicable to the production of ladies' skirts or 'crinolines.'"
Letters Patent sealed.

FLEURMAN. 8th December 1863.

3078. JEANNETTE FLEURMAN, Milliner, of 12, Baker Street, Portman Square, in the County of Middlesex, for an invention for—"Improvements in crinolines."
Provisional protection only.

WANKLYN. 8th December 1863.

3079. WILLIAM WANKLYN, of the Albion Mills, Bury, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in the construction of machinery for ginning cotton."
Letters Patent sealed.

GRIMES. 8th December 1863.

3080. GEORGE CHARLES GRIMES, of No. 8, Wandle Terrace, South Street, Wandsworth, in the County of Surrey, for an invention for—"Improvements in the manufacture of fusees, vesuvians or other cigar or pipe lights, and in means or apparatus employed in the manufacture of cigar or pipe lights, lucifer matches and vestas."
Provisional protection only.

BRIERLEY. 8th December 1863.

3081. JOHN HENRY BRIERLEY, of Beech Hill Mills, Halifax, and 58, Aldermanbury, London, for an invention for—"Improvements in buckles for brace and other dress fastenings."
Provisional protection only.

JAMES. 8th December 1863.

3082. HENRY BENSON JAMES, of Fish Street Hill, in the City of London, Engineer, for an invention for—"An improved composition for covering steam-boilers and pipes and other surfaces."
Letters Patent sealed.

AUBERT. 8th December 1863.

3083. JEAN AUBERT, of No. 10, Rue de la Fidélité, Paris, Engineer, for an invention for—"Improvements in railway carriage and other brakes."
Letters Patent sealed.

WRAY. 8th December 1863.

3084. JOSEPH WRAY, of the firm of Joseph Wray and Brothers, of Manchester, in the County of Lancaster, Spindle Manufacturer, for an invention for—"Certain improvements in the method of manufacturing spindles and 'skewers' to be employed in spinning fibrous substances, and in apparatus connected therewith."
Letters Patent sealed.

THORNTON. 8th December 1863.

3085. ROBERT THORNTON, of Edinburgh, in the County of Mid-Lothian, North Britain, Engineer, for an invention for—"Improvements in the construction of railway and other bridges."
Provisional protection only.

GUTHRIE. 8th December 1863.

3086. MALCOM GUTHRIE, of Liverpool, in the County of Lancaster, for an invention for—"An improved stamp for marking post letters and other articles requiring to be stamped or marked in a like manner."—*Partly a communication to him from abroad by Edwin Guthrie, of New York, in the United States of America, and partly the result of his own invention.*
Provisional protection only.

BLAKELY. 8th December 1863.

3087. THEOPHILUS ALEXANDER BLAKELY, of Montpelier Square, in the County of Middlesex, late Captain Royal Artillery, for an invention for—"Improvements in projectiles for ordnance and in loading and firing ordnance."
Letters Patent sealed.

BLAKELY. 8th December 1863.

3088. THEOPHILUS ALEXANDER BLAKELY, of Montpelier Square, in the County of Middlesex, late Captain Royal Artillery, for an invention for —"Improvements in metallic packings."
Letters Patent sealed.

DESVIGNES. 8th December 1863.

3089. PETER HUBERT DESVIGNES, of Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in apparatus for exhibiting dissolving views."
Letters Patent sealed.

HARROWBY. FOULDS. HARROWBY. 8th December 1863.

3090. ROBERT HARROWBY, of Bradford, in the County of York, Machine Maker, JEREMIAH FOULDS, of the same place, Overlooker, and ALFRED HARROWBY, also of Bradford, aforesaid, Machine Maker, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

EASTWOOD. MATTHEWS. 8th December 1863.

3091. HENRY EASTWOOD, of Elland, in the County of York, Machine Maker, and BENJAMIN MATTHEWS, of the same place, Mechanic, for an invention for—"Improvements in machinery or apparatus for carding wool or other fibrous substances."
Provisional protection only.

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BOYD.
8th December 1863.

3092. JAMES EDWARD BOYD, of Hither Green, Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in lawn mowing and grass cutting machines."—*Partly a communication to him from abroad by Henry Fisher, of Alliance, Ohio, in the United States of America, and partly his own invention.*
Provisional protection only.

HARRISON.
8th December 1863.

3093. THOMAS HARRISON, of Tudhoe, near Ferry Hill, in the County of Durham, Mechanical Engineer, for an invention for—"Improvements in machinery for puddling iron and steel." *Letters Patent sealed.*

WASON.
8th December 1863.

3094. PETER RIGBY WASON, of Corwar House, near Dervan, Ayrshire, for an invention for—"Improvements in apparatus used for heating and ventilating horticultural buildings." *Letters Patent sealed.*

CRANSTON.
8th December 1863.

3095. WILLIAM MCINTYRE CRANSTON, of No. 77, Upper Thames Street, in the City of London, for an invention for—"Improvements in reaping and mowing machines."—*A communication to him from abroad by William Anson Wood, a person resident at Hoosick Falls, New York, United States of America. Letters Patent sealed.*

HENRY.
8th December 1863.

3096. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for regulating the passage of aëriform and other fluids."—*A communication to him from abroad by Charles Joseph Louis Meynard, of 33, Boulevart Saint Martin, Paris, France. Letters Patent sealed.*

TOD.
8th December 1863.

3097. JAMES TOD, of Little Ivy Mill, near Maidstone, in the County of Kent, Flock Manufacturer, for an invention for—"An improved preparation for the treatment of flock and other furniture padding to render the same obnoxious to vermin."
Provisional protection only.

GREGORY.
8th December 1863.

3098. EBENEZER NOAH GREGORY, of Albany Road, Camberwell, in the County of Surrey, Wire Cloth Weaver, for an invention for—"Improvements in driving bands and pulleys for transmitting motion." *Provisional protection only.*

NEWTON.
8th December 1863.

3099. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and apparatus for preparing cork stuffing for mattresses, pillows, cushions and other articles, and in the mode of applying the cork stuffing thereto."—*A communication to him from abroad by Anton Courlander Crondal, of New York, in the United States of America. Provisional protection only.*

WINANS.
WINANS.
8th December 1863.

3100. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improvements in adapting screw propellers for propelling ships or vessels for ocean navigation." *Letters Patent sealed.*

AUDINWOOD.
9th December 1863.

3101. HENRY AUDINWOOD, of Weston-upon-Trent, in the County of Derby, Engineer, for an invention for—"Improvements in raising or removing grain from one place to another." *Provisional protection only.*

FLETCHER.
FORREST.
9th December 1863.

3102. THOMAS HANMER FLETCHER, late Captain in the Military Train, and ROBERT FORREST, Gent., both of Woolwich, in the County of Kent, for an invention for—"An improved war rocket and rocket tube." *Letters Patent sealed.*

COLE.
9th December 1863.

3103. WILLIAM HENRY COLE, of No. 52, Gracechurch Street, in the City of London, Merchant, for an invention for—"Firstly, for casting steam cylinders of steam-engines in the form of a segment of a cylindrical ring or circle, and, secondly, for the machine for boring them truly cylindrical and retaining the line of the bore on the curve of a true circle."—*A communication to him from abroad by Samuel Woodruff and Henry B. Beach, both of Hartford, in the County of Hartford, and State of Connecticut, in the United States of America.*
Complete specification; Letters Patent sealed.

MACKLIN.
9th December 1863.

3104. WILLIAM MACKLIN, of Lincoln, in the County of Lincolnshire, Engineering Draughtsman, for an invention for—"Improvements in apparatus for reversing the motion of locomotives and other steam-engines." *Provisional protection only.*

WRIGHT.
9th December 1863.

3105. JOSEPH WRIGHT, of Dudley, in the County of Worcester, Engineer, for an invention for—"Improvements in furnaces, fire-grates and fire-bars."
Letters Patent sealed.

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PERKS.
9th December 1863.

3106. THOMAS PERKS, of Birmingham, in the County of Warwick, Jeweller, for an invention for—"Improvements in fastenings for brooches and other articles of jewellery." *Provisional protection only.*

MORGAN.
9th December 1863.

3107. THOMAS VAUGHAN MORGAN, of Battersea Works, in the County of Surrey, Crucible Manufacturer, for an invention for—"Improvements in the treatment and purification of plumbago for the manufacture of crucibles and other fireproof articles, and in apparatus employed therein." *Letters Patent sealed.*

KENNEDY.
9th December 1863.

3108. NEIL KENNEDY, junior, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in fire-arms." *Provisional protection only.*

HILLARY.
9th December 1863.

3109. MARK HILLARY, of Andover, in the County of Hants, Contractor, for an invention for—"Improvements in fastenings for doors." *Letters Patent sealed.*

GALLOWAY.
GALLOWAY.
10th December 1863.

3110. WILLIAM GALLOWAY, and JOHN GALLOWAY, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in presses for bending metal plates into the various forms required in naval architecture and for other purposes."—*A communication to them from abroad by John Cochrane, of the City of New York, in the United States of America.* *Provisional protection only.*

TURNER.
10th December 1863.

3111. HENRY TURNER, of Leeds, in the County of York, Strap Manufacturer, for an invention for—"Improvements in apparatus for preventing the explosion of steam-boilers." *Letters Patent sealed.*

FRIEDLANDER.
10th December 1863.

3112. MORRITZ FRIEDLANDER, Merchant, of the City of Breslau, in the Kingdom of Prussia, for an invention for—"Improved machinery for the treatment of tow and other fibrous substances." *Letters Patent sealed.*

REID.
RYDILL.
10th December 1863.

3113. ALEXANDER REID, of Perth, Scotland, and GEORGE RYDILL, of Dewsbury, in the County of York, for an invention for—"An improved rag machine cylinder or swift and tooth of an improved principle, for the purpose of pulling up woollen and cotton rags, silk rags, hair bagging, and for cleaning and opening wools and waste, and for the pulling up of fibrous substances in the rag." *Letters Patent sealed.*

POLS.
BERNARD.
10th December 1863.

3114. JOHN ANTHONY POLS, of Saint Martin's Street, in the County of Middlesex, and PETER OWEN BERNARD, of the City of London, Wine Merchant, for an invention for—"Improvements in obtaining purified or refined oils and in obtaining oil cakes from cotton seed and other vegetable substances, also in refining or purifying cod liver oil." *Provisional protection only.*

CLARK.
10th December 1863.

3115. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Certain improvements in port closers for vessels of war and forts."—*A communication to him from abroad by William Stuart Auchincloss, of the City of New York, in the United States of America.* *Provisional protection only.*

BOUSFIELD.
10th December 1863.

3116. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of india-rubber and gutta-percha compounds."—*A communication to him from abroad by Thomas Mayall, a person resident at Roxburgh, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

PYNE.
10th December 1863.

3117. RICHARD WILLIAM PYNE, of Grove Lane, Camberwell, in the County of Surrey, Builder, for an invention for—"An improved sash or shutter fastener, also applicable to doors and casements." *Letters Patent sealed.*

DARWEN.
HADDON.
11th December 1863.

3118. EDMUND DARWEN, of Birmingham, in the County of Warwick, Merchant, and JOHN HADDON, of Birmingham, aforesaid, Machinist, for an invention for—"Improvements in machinery for the manufacture of nails and rivets." *Letters Patent sealed.*

TUCHET.
11th December 1863.

3119. SUSAN TUCHET, commonly called the Honourable Susan Tuchet, of 14, Liverpool Street, Dover, in the County of Kent, Spinster, for an invention for—"An improved roller for window-blinds." *Provisional protection only.*

BULLOUGH.
11th December 1863.

3120. JAMES BULLOUGH, of Accrington, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

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LIVINGSTONE. 11th December 1863.

3121. WILLIAM LIVINGSTONE, of 51, Glengall Road, Poplar, in the County of Middlesex, Engineer, for an invention for—"An improved feathering screw propeller with fixed blades." *Letters Patent sealed*

SEATON. 11th December 1863.

3122. CHARLES SEATON, of Queen's Street, Mayfair, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the permanent way of railways." *Provisional protection only.*

CORBY. 11th December 1863.

3123. JOHN CORBY, of Dunoon, in the County of Argyle, North Britain, Engineer, for an invention for—"Improvements in centrifugal machines for extracting the syrups from sugar." *Letters Patent sealed.*

EPPS. 11th December 1863.

3124. ALEXANDER EPPS, of Chilham, in the County of Kent, Builder, for an invention for—"Improvements in malt and hop kilns, which improvements are partly applicable to the ventilation and warming of buildings, and to the drying of various substances." *Letters Patent sealed.*

SHEPHERD. 11th December 1863.

3125. EDWARD SHEPHERD, of Wakefield, in the West Riding of the County of York, Gentleman, for an invention for—"Improvements in the preparation or manufacture of cocoa nut fibre for matting purposes." *Letters Patent sealed.*

WEBB. 11th December 1863.

3126. THOMAS WEBB, of Smallwood Manor, Uttoxeter, in the County of Stafford, for an invention for—"Improvements in engines for hauling agricultural implements, and also in traction engines." *Letters Patent sealed.*

KINSEY. 11th December 1863.

3127. HENRY KINSEY, of the Town of Nottingham, Engineer, for an invention for —"Improvements in bonnet front machines and apparatus connected therewith." *Provisional protection only.*

WALTON. 11th December 1863.

3128. NICHOLAS WALTON, of Manchester, in the County of Lancaster, for an invention for—"Improvements in washing, wringing and mangling machines." *Letters Patent sealed.*

CLIFF. 11th December 1863.

3129. JOHN CLIFF, of the Imperial Potteries, Lambeth, in the County of Surrey, for an invention for—"Improvements in apparatus for transmitting motive-power." *Letters Patent sealed.*

CLIFF. 11th December 1863.

3130. JOHN CLIFF, of the Imperial Potteries, Lambeth, in the County of Surrey, for an invention for—"Improvements in lamps for burning hydro-carbons." *Provisional protection only.*

SOLVAY. 11th December 1863.

3131. ERNEST SOLVAY, of Brussels, in the Kingdom of Belgium, Chemist, for an invention for—"Apparatus by means of which the formation of carbonates of soda by direct combination is rendered practically available for manufacturing purposes." *Letters Patent sealed.*

BROOMAN. 11th December 1863.

3132. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of nuts."—*A communication to him from abroad by Jean François Fuzellier Leger, residing at Nouzon, France.* *Provisional protection only.*

BROOMAN. 11th December 1863.

3133. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for grounding or colouring wall paper and other fabrics."—*A communication to him from abroad by Richard McNamee, residing at New York, United States of America.* *Letters Patent sealed.*

ULLMER. ULLMER. 11th December 1863.

3134. EDWIN ULLMER, and WILLIAM ULLMER, both of Castle Street, in the City of London, Printing Machine Manufacturers, for an invention for—"Improvements in cylinder printing machines." *Provisional protection only.*

PRATT. 11th December 1863.

3135. WILLIAM THOMAS CASSEL PRATT, of Newport, in the County of Monmouth, Surgeon, for an invention for—"A new method of and apparatus for enabling the points on railways to be shifted by an attendant in the train, while the train is in motion." *Provisional protection only.*

CLAYTON. 12th December 1863.

3136. THOMAS CLAYTON, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in generators for making gas from volatile fluids." *Letters Patent sealed.*

TOWNSEND. 12th December 1863.

3137. JOSEPH TOWNSEND, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in sizeing or dressing and in drying fibrous materials or fabrics, and in apparatus therefor." *Letters Patent sealed.*

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WILSON.
12th December 1863.

3138. JOHN CHARLES WILSON, of 14A, Cannon Street, London, Civil and Mechanical Engineer, for an invention for—"Improvements in machinery for unhusking rice and other seeds." *Provisional protection only.*

DOBSON.
HODGKINSON.
GREENHALGH.
HAMILTON.
12th December 1863.

3139. BENJAMIN DOBSON, of Bolton, in the County of Lancaster, Machine Maker, JOHN HODGKINSON, of the same place, Cotton Spinner, DANIEL GREENHALGH, of the same place, Manager, and FRANCIS HAMILTON, of the same place, Foreman, for an invention for—"Certain improvements in machinery for carding cotton and other fibrous substances." *Letters Patent sealed.*

BROOMAN.
12th December 1863.

3140. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in steam-engines." —*A communication to him from abroad by Victor Barbier, residing at Montbeliard, France.* *Provisional protection only.*

JOHNSON.
12th December 1863.

3141. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction and mode of attaching of india-rubber and other composition soles to boots and shoes or to the uppers thereof."—*A communication to him from abroad by Charles MacBurney, of Boston, in the County of Suffolk, State of Massachusetts, United States of America.* *Provisional protection only.*

JOHNSON.
12th December 1863.

3142. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in raising sunken vessels and other submerged dead weights, and in preventing the sinking of vessels in case of accident at sea, and in the apparatus employed therein."—*A communication to him from abroad by James McLeod, of the City of Montreal, in the Province of Canada, Master Mariner.* *Letters Patent sealed.*

RAY.
12th December 1863.

3143. ROBERT HENRY RAY, of No. 15, Princes Gate, Hyde Park, in the County of Middlesex, for an invention for—"The manufacture of a certain sauce now and hereafter to be called The Essex Sauce." *Provisional protection only.*

SAUNDERS.
12th December 1863.

3144. ROBERT SAUNDERS, of Croydon, in the County of Surrey, Gentleman, for an invention for—"Improved arrangements of apparatus or mechanism for rendering ships' cables less likely to part during heavy riding." *Letters Patent sealed.*

PLATT.
RICHARDSON.
12th December 1863.

3145. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in the preparation of clay for the manufacture of bricks, tiles and other articles which may be made of such material." *Letters Patent sealed.*

JONES.
12th December 1863.

3146. WALTER THOMAS WHITMORE JONES, of No. 22, Holles Street, in the County of Middlesex, for an invention for—"Improvements in apparatus to be applied to lamps." *Letters Patent sealed.*

BOUSFIELD.
12th December 1863.

3147. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in washing machinery."—*A communication to him from abroad by Thomas Mayall, a person resident at Roxburgh, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

WARD.
12th December 1863.

3148. PETER WARD, of No. 2, Clouds Hill Villas, St. George's, Bristol, for an invention for—"Improvements in packing pistons, piston rods and other parts of machinery, and in the preparation of material therefor." *Letters Patent sealed.*

BOUSFIELD.
12th December 1863.

3149. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in fulling machinery."—*A communication to him from abroad by Thomas Mayall, a person resident at Roxburgh, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

STEWART.
14th December 1863.

3150. CHARLES STEWART, of Dundee, in the County of Forfar, North Britain, Boot and Shoe Maker, for an invention for—"Improvements in making boots and shoes." *Provisional protection only.*

BAILEY.
SPEED.
14th December 1863.

3151. JOHN AYLESWORTH BAILEY, of Brooklyn, State of New York, and JOHN JAMES SPEED, of Gorham, State of Maine, United States of America, Telegraph Engineers, for an invention for—"A new and improved mode or process of covering or insulating wire for telegraphic and other uses or purposes, with twine, cordage and other covering of a like character." *Provisional protection only.*

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WRIGHT.
14th December 1863.

3152. JOHN WRIGHT, of Marple, near Stockport, in the County of Chester, for an invention for—"Improvements in the manufacture of superphosphate of lime."
Provisional protection only.

SPENCE.
14th December 1863.

3153. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in calendering machines."—*A communication to him from abroad by Jules Auguste Lequeux Muston, of No. 21, Rue Lemire, Rouen, in the Empire of France, Coal Merchant.* *Provisional protection only.*

RASCOL.
14th December 1863.

3154. EUGÈNE RASCOL, of No. 4, Brydges Street, Covent Garden, in the County of Middlesex, for an invention for—"Improvements in the manufacture of glass."—*A communication to him from abroad by M. Tony Petitjean, of Geneva, Switzerland, Chemist.* *Provisional protection only.*

SMITH.
SMITH.
14th December 1863.

3155. SAMUEL SMITH, and THOMAS SMITH, of No. 5, Fell Street, in the City of London, Wholesale Confectioners, for an invention for—"Improvements in means or apparatus for the manufacture of lozenges." *Letters Patent sealed.*

BROOMAN.
14th December 1863.

3156. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in ships' cooking and distilling apparatus."—*A communication to him from abroad by Auguste Cardinal, junior, of Nantes, France.* *Provisional protection only.*

EDWARDS.
14th December 1863.

3157. SAMUEL EDWARDS, of Birmingham, in the County of Warwick, Pearl Grinder, for an invention for—"Improvements in grinding pearl, and which said improvements are also applicable for grinding other materials."
Provisional protection only.

FOTHERGILL.
14th December 1863.

3158. BENJAMIN FOTHERGILL, of 27, Cornhill, in the City of London, Consulting Engineer, for an invention for—"Improvements in machinery or apparatus for combing wool and other fibrous substances." *Letters Patent sealed.*

WILSON.
14th December 1863.

3159. THOMAS WILSON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in breech loading fire-arms, projectiles and cartridges, and in tools or apparatus for the manufacture of projectiles."
Provisional protection only.

THORNTHWAITE.
14th December 1863

3160. WILLIAM HENRY THORNTHWAITE, of Newgate Street, in the City of London, Analytical Chemist, for an invention for—"Improvements in the manufacture of chromate of potash, chromate of soda, and other salts of chrome and soda and potash." *Provisional protection only.*

SEARS.
15th December 1863.

3161. HENRY BEAUFORT SEARS, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in cleansing or dusting rice and other grain, and in the machinery or apparatus employed for that purpose." *Letters Patent sealed.*

DE STAINS.
15th December 1863.

3162. VICTOR DE STAINS, B.A., living at No. 1A, Florence Street, Upper Street, Islington, N., for an invention for—"Improvements in steam apparatus for raising and forcing water, applicable to steam navigation and water works in general."
Provisional protection only.

OBERT.
15th December 1863.

3163. VICTOR OBERT, of No. 63, Rue Meslay, in the City of Paris, in the Empire of France, Merchant, for an invention for—"A new toy, being a mechanical wooden horse." *Provisional protection only.*

NOBEL.
15th December 1863.

3164. LUDWIG NOBEL, of St. Petersburg, Russia, and of South Street, Kennington, in the County of Surrey, Engineer, for an invention for—"Improvements in the manufacture and strengthening of guns, hydraulic press and other cylinders."
Letters Patent sealed.

BOX.
15th December 1863.

3165. WILLIAM WILLIAMS BOX, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in fire bars for the boilers of locomotive and other engines, and for fire boxes and furnaces generally."
Letters Patent sealed; specification filed by order.

DAVIDSON.
15th December 1863.

3166. JAMES DAVIDSON, of Woolwich, in the County of Kent, Mechanical Engineer, for an invention for—"Improved machinery for manufacturing casks."
Letters Patent sealed.

JOHNSON.
15th December 1863.

3167. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in grinding and polishing glass, and in the machinery or apparatus employed therein."—*A communication to him from abroad by James Dodge, of Waterford, Saratoga County, State of New York, United States of America.* *Letters Patent sealed.*

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CHADWICK. CLENCH. 15th December 1863.

3168. HENRY CHADWICK, of Topsham, in the County of Devon, Manufacturing and Analytical Chemist, and JOHN CLENCH, of the City of Exeter, Accountant, for an invention for—"Improvements in utilizing the waste liquors resulting from the preparation of fibrous matters in paper pulp making, and in the machinery or apparatus to be used therein." *Letters Patent sealed.*

STÄRCK. 15th December 1863.

3169. AXEL STÄRCK, of No. 27, Leadenhall Street, in the City of London, for an invention for—"Improvements in the manufacture of paper from a material not hitherto used for that purpose."—*A communication to him from abroad by Matthew Carter, a person resident at Barcelona.* *Provisional protection only.*

ROBINSON. 15th December 1863.

3170. CHARLES JAMES ROBINSON, of Walmer Buildings, Water Street, Liverpool, Merchant, for an invention for—"Improvements in pressing cotton and other fibrous substances into bales, and in apparatus to be used for this purpose."—*A communication to him from abroad by George Brunton, a person resident at Cochin, in the East Indies.* *Letters Patent sealed.*

SMITH. 16th December 1863.

3171. JOSEPH SMITH, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

BRYDEN. 16th December 1863.

3172. JOHN MILLER BRYDEN, of Edinburgh, Glasgow and Perth, North Britain, Window-blind Maker, for an invention for—"Improved apparatus for painting venetian blinds." *Letters Patent sealed.*

WORRALL. 16th December 1863.

3173. JOHN MAYO WORRALL, of Ordsall, Salford, in the County of Lancaster, Dyer and Finisher, for an invention for—"Certain improvements in apparatus or mechanism for producing a superior finish upon woven fabrics, which is more particularly applicable to those termed 'Beaver-teens' or 'Imperials.'" *Letters Patent sealed.*

SELLARS. 16th December 1863.

3174. JOHN SELLARS, of the City of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"An improved preparation of food for cattle." *Provisional protection only.*

HINDLE. CALVERT. THORNTON. 16th December 1863.

3175. JAMES HINDLE, of Sabden, Calico Printer, WILLIAM FIELDING CALVERT, of Enfield, Cotton Spinner, and EMANUEL THORNTON, of Enfield, Manager, all in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HOLLANDS. 16th December 1863.

3176. EDWARD RICHARD HOLLANDS, of No. 12, Ray Street, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in portable hydraulic punching apparatus." *Provisional protection only.*

GOUVERNON. 16th December 1863.

3177. JULES GOUVERNON, of Saint Imier, Switzerland, Watch Maker, for an invention for—"Improvements in watches." *Provisional protection only.*

BROOMAN. 16th December 1863.

3178. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for working railway signals and for raising and lowering signal lamps."—*A communication to him from abroad by Jean Joseph Baranowski, of Turin, Italy.* *Letters Patent sealed.*

BLAKELY. 16th December 1863.

3179. THEOPHILUS ALEXANDER BLAKELY, of Montpelier Square, in the County of Middlesex, late Captain Royal Artillery, for an invention for—"Improvements in the construction of cannon and other ordnance." *Letters Patent sealed.*

MYERS. GLOAG. 16th December 1863.

3180. EDWARD MYERS, of Millbank Row, Westminster, in the County of Middlesex, Civil Engineer, and HENRY DUNDAS GLOAG, of Pall Mall, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of rotary pumps." *Provisional protection only.*

NEWTON. 16th December 1863.

3181. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Certain improvements in sewing-machinery."—*A communication to him from abroad by Isaac Merrit Singer, of New York City, United States of America.* *Letters Patent sealed.*

FELL. 16th December 1863.

3182. JOHN BARRACLOUGH FELL, of Sparkbridge, near Newton-in-Cartmel, in the County of Lancaster, for an invention for—"Improvements in railway engines, carriages and permanent way for steep inclines." *Letters Patent sealed.*

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HUMFREY.
16th December 1863.

3183. CHARLES HUMFREY, of Suffolk Grove, Southwark, in the County of Surrey, for an invention for—"Improvements in dissolving india-rubber."
Letters Patent sealed.

ELLIS.
17th December 1863.

3184. GEORGE HENRY ELLIS, of Romney Cottage, Wellington Road, in the Parish of Bromley, Middlesex, Engineer, for an invention for—"Improvements in cases for packing and storing bottles."
Provisional protection only.

MARRISON.
17th December 1863.

3185. ROBERT MARRISON, of Great Orford Street, Norwich, in the County of Norfolk, Gun Manufacturer, for an invention for—"Improvements in breech loading fire-arms."
Provisional protection only.

CLARK.
17th December 1863.

3186. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for indicating the level of water in steam-boilers."—*A communication to him from abroad by Charles Weyher, Engineer, of 29, Boulevart St. Martin, Paris.*
Provisional protection only.

JEFFREYS.
17th December 1863.

3187. CHARLES JEFFREYS, of King Street, Northampton Square, in the County of Middlesex, Jewel Case Manufacturer, for an invention for—"Improvements in jewel, photograph, instrument and other cases."
Provisional protection only.

JOHNSON.
17th December 1863.

3188. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in cleaning roadways and in the machinery or apparatus employed therein."—*A communication to him from abroad by Thomas Agudio, of Turin, in the Kingdom of Italy, Engineer.*
Provisional protection only.

ASTBURY.
18th December 1863.

3189. JOSEPH ASTBURY, of Hadley, near Wellington, in the County of Salop, Foreman of Bar Iron Works, for an invention for—"Improvements in forge hammers."
Letters Patent sealed.

CLARKE.
18th December 1863.

3190. WILLIAM CLARKE, of Barnton, near Northwich, in the County of Chester, Rope Manufacturer, for an invention for—"Improvements in the manufacture of ropes made of hemp or other fibrous substances."
Letters Patent sealed.

ALISON.
HALLIWELL.
18th December 1863.

3191. ALEXANDER ALISON, of No. 72, Sloane Street, Chelsea, in the County of Middlesex, Gentleman, and JAMES HALLIWELL, of No. 2, Queen Street Place, in the City of London, Railway Contractor, for an invention for—"Improvements in atmospheric railways."
Provisional protection only.

GARDNER.
18th December 1863.

3192. PETER GARDNER, of Banbury, in the County of Oxford, Land Surveyor, for an invention for—"Improvements in the construction of ordnance and in projectiles to be used therewith."
Provisional protection only.

HYATT.
18th December 1863.

3193. THADDEUS HYATT, Native of the United States of America, and now residing at La Rochelle, in the Empire of France, for an invention for—"An improved shop or window shutter made of corrugated sheet iron."
Letters Patent sealed.

PARSONS.
18th December 1863.

3194. PERCIVAL MOSES PARSONS, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in ordnance, fire-arms and projectiles."
Provisional protection only.

ADAMS.
18th December 1863.

3195. WILLIAM BRIDGES ADAMS, of Holly Mount, Hampstead, in the County of Middlesex, Engineer, for an invention for—"Improvements in locomotive engines and trains for railways, tramways and common roads."
Letters Patent sealed.

SAUNDERS.
18th December 1863.

3196. ROBERT SAUNDERS, of Croydon, in the County of Surrey, Gentleman, for an invention for—"Improvements in the construction and building of portable cottages or houses and other buildings."
Letters Patent sealed.

BONNEVILLE.
18th December 1863.

3197. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in letter-boxes."—*A communication from Emmanuel Neriny, a person residing at Turin, in the Kingdom of Italy.*
Provisional protection only.

BONNEVILLE.
18th December 1863.

3198. HENRI ADRIEN BONNEVILLE, Patent Agent, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in the manufacture of socks."—*A communication from Pierre Dominique Lacroix, a person residing at Passage Choiseul, Paris, aforesaid.*
Complete specification; Letters Patent sealed.

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CLAYTON. 18th December 1863.

3199. HENRY CLAYTON, of the "Atlas Works," Upper Park Place, Dorset Square, in the County of Middlesex, for an invention for—"Improvements in machinery for manufacturing bricks." *Letters Patent sealed.*

MACARTHY. 19th December 1863.

3200. JOHN MACARTHY, late of 83, Claremont Avenue, Brooklyn, New York, in the United States of America, but at present residing at 32, Argyle Street, King's Cross, in the County of Middlesex, for an invention for—"Improvements in taps, cocks or faucets."—*A communication to him from abroad by John Broughton, a person resident at Chicago, Illinois, in the United States of America. Letters Patent sealed.*

NOTON. 19th December 1863.

3201. WILLIAM NOTON, of Oldham, in the County of Lancaster, Cotton Spinner, for an invention for—"Certain improvements in machinery for opening and scutching cotton and other fibrous substances." *Letters Patent sealed.*

LEGG. 19th December 1863.

3202. ROBERT LEGG, of 14, Owen's Row, Clerkenwell, in the County of Middlesex, Millwright and Engineer, for an invention for—"Improvements in the construction of shot proof iron or steel walls suitable for the sides of war ships, floating batteries or forts." *Provisional protection only.*

GOLDIE. 19th December 1863.

3203. THOMAS GOLDIE, of Airdrie, in the County of Lanark, North Britain, Manager, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HUGHES. 19th December 1863.

3204. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the composition of ink suitable for printing and coloring or shading bank notes and other instruments and documents, by the copper plate, lithographic, typographic, xylographic, or other processes of printing."—*A communication to him from abroad by Tracy Edson, of New York, United States of America.* *Complete specification; Letters Patent sealed.*

COLLINS. 19th December 1863.

3205. FREDERICK WOOLCOT COLLINS, of Morris, in the County of Otsego, and State of New York, United States of America, for an invention for—"A certain improvement in apparatus for training hops." *Letters Patent sealed.*

GEDGE. 19th December 1863.

3206. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for racking and decanting liquids (termed 'Laburthe's Apparatus')."—*A communication to him from abroad by Clément Laburthe, of No. 15, Passage des Petites Ecuries, Paris, France, Merchant. Letters Patent sealed.*

HASELTINE. 19th December 1863.

3207. GEORGE HASELTINE, of the "International Patent Office," No. 12, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved oil more especially designed for mixing paints and colors, and a new mode of manufacturing the same."—*A communication to him from abroad by Adolph Millochau, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

GISBORNE. 19th December 1863.

3208. FREDERIC NEWTON GISBORNE, of No. 3, Adelaide Place, London Bridge, in the City of London, Engineer and Electrician, for an invention for—"Improvements in the means of communicating signals on board ship, on railways and for other purposes." *Letters Patent sealed.*

BOLTON. 19th December 1863.

3209. CHARLES BOLTON, of Moreton Street, Pimlico, in the County of Middlesex, Upholsterer, for an invention for—"Improvements in apparatus for producing optical illusions, which may be used for dramatic and other entertainments." *Letters Patent sealed.*

WALTON. 19th December 1863.

3210. FREDERICK WALTON, of the British Grove Works, Chiswick, in the County of Middlesex, for an invention for—"Improvements in the manufacture of floor cloths and coverings and similar fabrics, and in pavements." *Letters Patent sealed.*

JUDKINS. 19th December 1863.

3211. CHARLES TIOT JUDKINS, of No. 22, Ludgate Street, in the City of London, Sewing-Machine Manufacturer, for an invention for—"Improvements in machines for sewing and stitching."—*A communication to him from abroad by Richard Mott Wanzer, of Hamilton, Canada West, in Her Majesty's Colony of North America.* *Letters Patent sealed.*

HOWDEN. 19th December 1863.

3212. JAMES HOWDEN, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in steam-engines and boilers, and in processes or apparatus to be employed in working the same." *Letters Patent sealed.*

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TOOTH.
19th December 1863.

3213. WILLIAM HENRY TOOTH, of Rhodeswell Road, Stepney, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of iron and steel, and in the machinery, apparatus and furnaces used therein, and for the production and application of gas to be employed in such manufacture, and the application of parts of the said apparatus to the manufacture of glass and alkali." *Letters Patent sealed.*

COOMBS.
PENDLEBURY.
21st December 1863.

3214. ISAAC COOMBS, Tin Plate Worker, and JOHN TOMLINSON PENDLEBURY, Blacksmith and Machinist, both of Elton, in the Parish of Bury, in the County of Lancashire, for an invention for—"Improvements in the construction of machines for cutting and bending wire and similar substances, for copper smiths, tin plate, iron and zinc sheet workers." *Provisional protection only.*

DIXON.
21st December 1863.

3215. WILLIAM JAMES DIXON, of Preston, in the County of Lancaster, Cotton Spinner, for an invention for—"Improvements in oil cans and in apparatus for lubricating." *Provisional protection only.*

CLARK.
BATHO.
21st December 1863.

3216. WILLIAM CLARK, Engineer in Chief to the Justices of the Peace, in Calcutta, in the Empire of India, now residing in London, and WILLIAM FOTHERGILL BATHO, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in machinery or apparatus for rolling roads, which is also applicable to traction engines and other similar purposes." *Letters Patent sealed.*

TANGYE.
21st December 1863.

3217. EDWARD TANGYE, of the firm of Tangye Brothers, of Brussels, in the Kingdom of Belgium, Manufacturers, for an invention for—"Improvements in the manufacture of welded iron chain and welded steel chain, and in tools to be employed in the said manufacture." *Letters Patent sealed.*

TAYLOR.
21st December 1863.

3218. ROBERT HEATON TAYLOR, of Brightside, near Rotherham, in the County of York, Engineer, for an invention for—"Improved apparatus for lubricating the cylinders of steam-engines." *Letters Patent sealed.*

PATERSON.
21st December 1863.

3219. ROBERT PATERSON, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

WILSON.
LINDSLEY.
21st December 1863.

3220. EDWARD WILSON, of the City and County of Worcester, Civil Engineer, and GEORGE LINDSLEY, of the same place, Locomotive Superintendent, for an invention for—"An improved method of feeding locomotive and other boilers, applicable also to the raising of water and other liquids." *Letters Patent sealed.*

BAYNES.
21st December 1863.

3221. ROBERT BAYNES, of Mansel Villas, Wimbledon, in the County of Surrey, Gentleman, for an invention for—"Improvements in apparatus for darning stockings and other fabrics." *Letters Patent sealed.*

FITZWILLIAM.
21st December 1863.

3222. FREDERICK HERBERT FITZWILLIAM, of Dorset Gardens, Brighton, in the County of Sussex, for an invention for—"An improved apparatus for steering ships and other floating bodies." *Provisional protection only.*

GREEN.
21st December 1863.

3223. JOHN GREEN, of Newtown Farm, in the Parish of St. Martin, in the County of Worcester, Agriculturist, for an invention for—"Improvements in the construction of harrows, cultivators and ploughs." *Letters Patent sealed.*

GREEN.
MASON.
21st December 1863.

3224. EDWIN JOHN GREEN, Manufacturer, of Birmingham, in the County of Warwick, and RICHARD MASON, Machinist, also of Birmingham, aforesaid, for an invention for—"A holder or suspender for holding cotton and other reels, spools, or balls, parts of which are also applicable for other useful purposes." *Letters Patent sealed.*

EASTWOOD.
21st December 1863.

3225. JAMES EASTWOOD, of Blackburn, in the County of Lancaster, for an invention for—"Improvements in apparatus for forcing size or other glutinous substances through pipes, to supply machines for sizing yarns, cloths or other materials." *Letters Patent sealed.*

HENRY.
21st December 1863.

3226. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for controlling the passage of fluids to and from casks and other vessels."—*A communication to him from abroad by the Société Hermann Lachapelle et Glover, of 33, Boulevart Saint Martin, Paris, France.* *Provisional protection only.*

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WITTENBERG. 21st December 1863.

3227. JULIUS LORENZ WITTENBERG, of Clarendon Road, Notting Hill, in the County of Middlesex, Gentleman, LL.D., for an invention for—"Improvements in wrappers or envelopes for receiving or enclosing papers and various other articles." *Provisional protection only.*

HENRY. 21st December 1863.

3228. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for constructing houses and other structures of plastic materials."—*A communication to him from abroad by Alphonse Pallu, of 33, Boulevart Saint Martin, Paris, France.* *Provisional protection only.*

FITZ GIBBON. 21st December 1863.

3229. VICTOR BEARE FITZ GIBBON, of Sidney House, in the City of Cork, Merchant, for an invention for —"Improvements in spring mattresses or beds and cushions." *Letters Patent sealed.*

NEWTON. 21st December 1863.

3230. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of cotton gins."—*A communication to him from abroad by Enoch Osgood, of New York City, United States of America.* *Letters Patent sealed.*

WINANS. WINANS. 21st December 1863.

3231. WILLIAM LOUIS WINANS, of Dover Street, in the County of Middlesex, Gentleman, and THOMAS WINANS, of Baltimore, in the United States of America, but now residing at Dover Street, aforesaid, Gentleman, for an invention for—"Improved means of and apparatus for trimming ships or vessels." *Letters Patent sealed.*

SHANKS. 22nd December 1863.

3232. JAMES SHANKS, of Saint Helens, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of caustic soda and caustic potash." *Letters Patent sealed.*

ADAMSON. 22nd December 1863.

3233. DANIEL ADAMSON, of the firm of Messieurs Bensons, Adamson and Garnets, Yorkshire Steel and Iron Works, Penistone, in the County of York, Engineer, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of steel and iron." *Letters Patent sealed.*

SAINTY. 22nd December 1863.

3234. JOHN SAINTY, of Burnham Market, Norfolk, Agricultural Implement Manufacturer, for an invention for—"An improved turnip cutter for cutting the last slice." *Letters Patent sealed; no specification filed.*

ROWE. 22nd December 1863.

3235. JOSEPH GRINDLEY ROWE, of No. 5, Queen Square, Westminster, in the County of Middlesex, for an invention for—"Improved means of communication between the guard and engine driver of a railway train." *Letters Patent sealed.*

BROOMAN. 22nd December 1863.

3236. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in feeding steam-boilers and condensers."—*A communication to him from abroad by Claude Jonchier, of Rue de Castries, Lyons, France.* *Letters Patent sealed.*

HAZELDINE. 22nd December 1863.

3237. FREDERICK HAZELDINE, of Lant Street, Borough, in the County of Surrey, for an invention for—"Improvements in hydraulic pumps." *Provisional protection only.*

GEDGE. 22nd December 1863.

3238. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the knives used for the cylinders and blocks of rag cutting or beating engines, the same arrangement of knives being also applicable to the crushing or beating of other substances."—*A communication to him from abroad by F. Meyer, Manufacturer, at Kaisersberg, Department of the Haut Rhin, France.* *Letters Patent sealed.*

EMANUEL. 22nd December 1863.

3239. HARRY EMANUEL, of Brook Street, Hanover Square, in the County of Middlesex, Diamond Merchant, for an invention for—"Certain new or improved means of protecting valuable articles exhibited in shop fronts and other places." *Provisional protection only.*

GJERS. 22nd December 1863.

3240. JOHN GJERS, of Middlesbrough, in the North Riding of the County of York, Engineer, for an invention for—"Improvements in lifts or machinery or apparatus for raising and lowering weights." *Letters Patent sealed.*

TURNER. 22nd December 1863.

3241. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

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JOHNSON.
23rd December 1863.

3242. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in shields or tips for boots and shoes."—*A communication to him from abroad by Horace Bearce, of Boston, in the United States of America.* *Letters Patent sealed.*

TWINING.
23rd December 1863.

3243. MARA MATILDA TWINING, of Grove Lodge, Clapham, for an invention for—"A new apparatus for the prevention of railway accidents." *Provisional protection only.*

VAN HEES.
23rd December 1863.

3244. RICHARD EDWARD VAN HEES, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Certain improvements in means to be employed for securing the ends of bands in packing 'bale goods,' and in machinery for manufacturing 'holdfasts' to be employed for the purpose." *Letters Patent sealed.*

WALTER.
23rd December 1863.

3245. ROBERT WALTER, of Crumpsall, in the County of Lancaster, Foreman, for an invention for—"Certain improvements in the construction and arrangement of 'safety cabs' or other like vehicles." *Provisional protection only.*

RONALD.
23rd December 1863.

3246. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in and apparatus for the conversion of ropes and other cordage into oakum, tow and paper stuff, parts of which are applicable to teasing and cleaning wool or hair on skins, and dressing 'waste' tow, wool, hair and other 'waste' fibres." *Letters Patent sealed.*

GEDGE.
23rd December 1863.

3247. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved apparatus for fixing candles upright in candlesticks."—*A communication to him from abroad by Emile Doire, of No. 15, Passage des Petites Ecuries, Paris, France, Manufacturer.* *Letters Patent sealed.*

KNOWLES.
23rd December 1863.

3248. JOHN KNOWLES, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for—"Certain improvements in apparatus for removing the sediment and scum from the interiour of steam-boilers." *Letters Patent sealed.*

MATHEW.
23rd December 1863.

3249. JOHN MATHEW, of Barnet, in the County of Herts, late Captain in the Liecester Militia, for an invention for—"Improvements in the construction of batteries for ships, forts and other defences." *Letters Patent sealed.*

CLARK.
23rd December 1863.

3250. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in percussion fuses for igniting the charges of explosive projectiles, mines, torpedoes, and other charges of gunpowder or other explosive or easily inflammable substances or compounds."—*A communication to him from abroad by John Jordon Eckel, of the City of New York, in the United States of America.* *Provisional protection only.*

BOUSFIELD.
23rd December 1863.

3251. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for forging and tempering bayonet blades, files and other articles."—*A communication to him from abroad by Hervey Waters, a person resident at Northbridge, Massachusetts, United States of America.* *Letters Patent sealed.*

WALTON.
23rd December 1863.

3252. FREDERICK WALTON, of the British Grove Works, Chiswick, in the County of Middlesex, for an invention for—"Improvements in telegraphic cables." *Letters Patent sealed.*

NEWTON.
23rd December 1863.

3253. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in breech loading fire-arms."—*A communication to him from abroad by Philo Remington, Samuel Remington and Eliphalet Remington, of Ilion, in the State of New York, United States of America.* *Letters Patent sealed.*

ARDREY.
BECKETT.
SMITH.
23rd December 1863.

3254. SAMUEL BRADLEY ARDREY, SAMUEL BECKETT, and WALTON SMITH, of Manchester, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in lathes for turning." *Letters Patent sealed.*

HOLLAND.
23rd December 1863.

3255. WILLIAM HOLLAND, Cotton Manufacturer, Adelphi Mills, Salford, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

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JOHNSON.
23rd December 1863.

3256. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in shields or tips for boots and shoes."—*A communication to him from abroad by Horace Bearce, of Boston, in the United States of America.* *Letters Patent sealed.*

BARBER.
24th December 1863.

3257. HENRY BARBER, Spring-knife Cutler, of No. 83, Oxford Road, in the Township of Ecclesall Bierlow, Sheffield, in the County of York, for an invention for—"Improvements in cutlery handles." *Letters Patent sealed.*

NOBLE.
24th December 1863.

3258. ANDREW NOBLE, of Newcastle-upon-Tyne, in the County of Northumberland, Manufacturing Engineer, for an invention for—"Improvements in the mode of igniting explosive projectiles." *Letters Patent sealed.*

LLOYD.
HARGRAVES.
24th December 1863.

3259. NATHANIEL LLOYD, and EDWIN HARGRAVES, of Church, near Accrington, in the County of Lancaster, for an invention for—"Improvements in treating printed and dyed fabrics." *Letters Patent sealed.*

MARSDEN.
STUBBS.
24th December 1863.

3260. WILLIAM MARSDEN, of Soho Foundry, Leeds, in the County of York, Ironfounder, and FRANCIS HENRY STUBBS, of Leeds, aforesaid, Mechanical Draughtsman, for an invention for—"Improvements in or applicable to locomotive engines." *Provisional protection only.*

GRAY.
24th December 1863.

3261. SOLOMON SALLY GRAY, of Boston, in the County of Suffolk, and State of Massachusetts, of the United States of America, for an invention for—"Improvements in paper or cloth lined paper collars for gentlemen and ladies." *Letters Patent sealed.*

GEDGE.
24th December 1863.

3262. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved kneading machine."—*A communication to him from abroad by Jean Antoine Kautret, of No. 15, Passage des Petites Ecuries, Paris, France.* *Provisional protection only.*

FORREST.
24th December 1863.

3263. HENRY PHILIP FORREST, of Worksop, in the County of Nottingham, Ironmonger, for an invention for—"Improvements in apparatus for drawing off and measuring fluids." *Letters Patent sealed.*

MAYNES.
24th December 1863.

3264. JOHN MAYNES, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in the manufacture of certain descriptions of artificial manure and in apparatus to be employed therein." *Provisional protection only.*

BOWDITCH.
24th December 1863.

3265. WILLIAM RENWICK BOWDITCH, Clerk, of Saint Andrew's, Wakefield, in the County of York, for an invention for—"Improvements in supplying air to lights in mines, and in the apparatus employed for that purpose." *Provisional protection only.*

DUCKETT.
24th December 1863.

3266. JAMES DUCKETT, of Burnley, in the County of Lancaster, Contractor and Brickmaker, for an invention for—"Improvements in the arrangement of furnaces, flues and kilns for drying and burning bricks, tiles and other articles, and in the application of the heat from the kilns to boilers for generating steam." *Provisional protection only.*

BROOMAN.
24th December 1863.

3267. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the permanent way of railways."—*A communication to him by Charles Ferdinand Zorès, a person resident at Plonegat Guerand, France.* *Letters Patent sealed.*

BRYANT.
24th December 1863.

3268. JOHN DYER BRYANT, of Saint Minver, near Wadebridge, in the County of Cornwall, for an invention for—"Improvements in projectiles for ordnance." *Letters Patent sealed.*

DAVENPORT.
COLE.
24th December 1863.

3269. THOMAS WILLIAM DAVENPORT, and SAMUEL COLE, of Balsall Heath, in the County of Worcester, Manufacturers, for an invention for—"Improvements in the manufacture of bracelets and other ornaments formed of paper or papier mâchè or other similar material." *Provisional protection only.*

PRICE.
24th December 1863.

3270. DAVID SIMPSON PRICE, of 26, Great George Street, Westminster, Consulting Chemist, for an invention for—"Improvements in the manufacture of projectiles." *Provisional protection only.*

BOESIGER.
26th December 1863.

3271 JOHN VICTOR BOESIGER, of the firm of Messieurs John Boesiger and Sons, of Roggwyl, in the Canton of Bern, in the Republic of Switzerland, and of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in sewing-machines." *Provisional protection only.*

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SMITH. 26th December 1863. **3272.** EDWARD TYRREL SMITH, of Astley's Theatre, Westminster Bridge Road, in the County of Surrey, Theatrical Manager, for an invention for—"Improvements in apparatus for exhibiting the flow of real water and other effects, applicable to theatrical purposes." *Provisional protection only.*

GJERS. 28th December 1863. **3273.** JOHN GJERS, of Middlesbrough, in the North Riding of the County of York, Engineer, for an invention for—"Improvements in kilns for calcining ironstone and limestone." *Letters Patent sealed.*

HALL. 28th December 1863. **3274.** THOMAS HALL, of Oldham, in the County of Lancaster, Engineer, for an invention for—"Improvements applicable to steam-boilers for economising fuel." *Letters Patent sealed.*

LINDNER. 28th December 1863. **3275.** EDWARD LINDNER, of New York, in the United States of America, now temporarily residing at Hamburg, Engineer, for an invention for—"Improvements in breech loading fire-arms and ordnance, and in apparatus for loading the same." *Letters Patent sealed.*

BILLUPS. 28th December 1863. **3276.** JONATHAN EDWIN BILLUPS, of 12, North Street, Westminster, for an invention for—"Improvements in the permanent way of railways." *Provisional protection only.*

BRAMALL. 28th December 1863. **3277.** EDWIN BRAMALL, of Newton, near Warrington, in the County of Lancaster, Agent, for an invention for—"Certain improvements in apparatus or mechanism for obtaining and applying motive-power." *Letters Patent sealed; no specification filed.*

WILSON. 28th December 1863. **3278.** WILLIAM WILSON, of the City of Manchester, in the County of Lancaster, Ironmonger, for an invention for—"A new method of decorating or ornamenting register or other grate fronts and cheeks, hearths of fire places, fenders, and the exterior surfaces of hot air stoves, and coil cases enclosing hot water or steam pipes." *Letters Patent sealed.*

CLARK. 28th December 1863. **3279.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in slide valves."—*A communication to him from abroad by Louis Amédée Lemaire, Engineer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

CLARK. 28th December 1863. **3280.** WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of purses, bags and other similar articles, and in fastenings for the same."—*A communication to him from abroad by Ignatz Lindenblith, Purse Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

TOZER. 28th December 1863. **3281.** THOMAS TOZER, of Dean Street, Soho, in the County of Middlesex, for an invention for—"Improvements in the construction of ships and vessels of war (also applicable to other ships and vessels), and in batteries and fortifications." *Letters Patent sealed.*

CRONIN. 28th December 1863. **3282.** JOHN BALDWIN CRONIN, of New York, in the United States of America, at present residing at the Queen's Hotel, Leeds, in the County of York, for an invention for—"Improvements in applying power to windlass and other barrels used for raising and lowering weights."—*A communication to him from abroad by the inventor, E. B. Requa, a person residing at Jersey City, in the said United States of America.* *Letters Patent sealed.*

BOURNE. 29th December 1863. **3283.** THEODORE BOURNE, of the City, County and State of New York, in the United States of America, for an invention for—"Improvements in cotton gins."—*A communication to him by Israel Fanning Brown, of New London, New London County, State of Connecticut, United States of America, the inventor.* *Letters Patent sealed.*

DE SAINT-MARTIN. 29th December 1863. **3284.** HENRI REDA DE SAINT-MARTIN, of 10, Old Compton Street, Soho, in the County of Middlesex, for an invention for—"Improvements in apparatus for aërial locomotion." *Provisional protection only.*

DESESTRE. 29th December 1863. **3285.** LOUIS EDOUARD DESESTRE, of No. 10, Rue de la Fidélité, Paris, Mechanician, for an invention for—"An improved pneumatic apparatus for filling barrels used for watering roads and other purposes." *Provisional protection only.*

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BAYLEY. 29th December 1863.

3286. HENRY BAYLEY, of Stalybridge, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Improvements in cotton gins." *Letters Patent sealed.*

WHITAKER. TONGUE. 29th December 1863.

3287. WILLIAM WHITAKER, of Bradford, in the County of York, Merchant, and WILLIAM TONGUE, of Wakefield, in the County of York, Engineer, for an invention for—"Improvements in machinery or apparatus for softening and separating the fibres of fibrous materials." *Letters Patent sealed.*

PRICE. 29th December 1863.

3288. JAMES PRICE, of Circus Street, Marylebone, in the County of Middlesex, Plumber and Glazier, for an invention for—"Improvements in apparatus for obtaining motive-power applicable to the working of pumps and other machinery." *Provisional protection only.*

TAYLOR. 29th December 1863.

3289. NATHANIEL FORTESCUE TAYLOR, of 5, Manby Street, Stratford, in the County of Essex, Gas Engineer, for an invention for—"Improvements in means or apparatus employed in increasing the illuminating power of coal gas." *Letters Patent sealed.*

CAUNTER. 29th December 1863.

3290. HENRY CAUNTER, of Stornoway, in the Island of Lewis, and County of Ross, for an invention for—"Improvements in the manufacture of lubricating matter or composition." *Letters Patent sealed.*

NAYLOR. 29th December 1863.

3291. DAVID NAYLOR, of Brighouse, in the County of York, Carpet Manufacturer, for an invention for—"Improvements in looms." *Letters Patent sealed by order; no specification filed.*

CUMMING. 29th December 1863.

3292. JAMES CUMMING, of the Great Western Road, Glasgow, for an invention for—"Improvements in apparatus used when giving motion to sewing-machines by straps or bands." *Letters Patent sealed; no specification filed.*

PENISTON. 29th December 1863.

3293. WILLIAM MICHAEL PENISTON, of No. 6, Great Queen Street, Westminster, C.E., for an invention for—"Improvements in constructing and arming ships and floating batteries." *Provisional protection only.*

VANDERFEESTEN. 29th December 1863.

3294. JEAN MICHEL VANDERFEESTEN, of Brussels, in the Kingdom of Belgium, Manufacturer, for an invention for—"Improvements in apparatus for heating, boiling, evaporating and distilling." *Letters Patent sealed.*

WHITELAW. 30th December 1863.

3295. ALEXANDER WHITELAW, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in treating brine from salted flesh or fish, for the obtainment of useful products therefrom." *Letters Patent sealed.*

DUNDONALD. 30th December 1863.

3296. THOMAS BARNES COCHRANE, Earl of DUNDONALD, 12, Queen's Gate, Kensington, County of Middlesex, for an invention for—"Improvements in the production of hydro-carbon and other oils from gas tar, coal tar, gas pitch, asphalte, coal, and other bituminous substances." *Provisional protection only.*

PATTERSON. 30th December 1863.

3297. JOHN PATTERSON, of Beverley, in the County of York, Engineer, for an invention for—"Improvements in machinery or apparatus for grinding, crushing and hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing and grinding of minerals and other hard substances." *Letters Patent sealed.*

GEDGE. 30th December 1863.

3298. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved teasling machine."—*A communication to him from abroad by Paul Joseph Vasset, senior, of No. 15, Passage des Petites Ecuries, Paris, France, Cloth Dresser.* *Letters Patent sealed.*

HOUDAYER. CORMIER. 30th December 1863.

3299. MAXIME CHARLES EDOUARD HOUDAYER, and JULES JEAN CORMIER, both of Paris, France, Gentlemen, for an invention for—"An improved apparatus to be attached to locomotive engines for the purpose of removing obstructions from railways." *Provisional protection only.*

LENGELÉE. MOREL. COQUET. 30th December 1863.

3300. AUGUSTE CHARLES JOSEPH LENGELÉE, FRANÇOIS PHILLIPE MOREL, and DESIRÉ GEORGE MATHIEU COQUET, all of Paris, France, Gentlemen, for an invention for—"Improved toys." *Provisional protection only.*

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PLATT. RICHARDSON. 30th December 1863.	3301. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, and WILLIAM RICHARDSON, of the same place, Mechanical Engineer, for an invention for—"Improvements in the manufacture of rollers or cylinders in which a certain degree of elasticity is required." *Provisional protection* NOT *granted.*
PHILLIPS. 30th December 1863.	3302. GEORGE PHILLIPS, of Holborn Hill, in the City of London, Chemist, for an invention for—"Improvements in the production of aniline colours." *Letters Patent sealed.*
BROWN. 31st December 1863.	3303. WILLIAM FULFORD BROWN, of No. 5, Westgate Street, Gloucester, in the County of Gloucestershire, Goldsmith, for an invention for—"Improved fastenings for scarfs, ribbons, neckties and other articles of dress, by means of a ring with a spring clasp or chain band or pliable shank." *Provisional protection only.*
STARKEY. HAWORTH. PHIPPEN. 31st December 1863.	3304. JOHN STARKEY, JOHN HAWORTH, Machinists, and JAMES KAY PHIPPEN, Law Student, all of Salford, in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*
BELL. 31st December 1863.	3305. ROBERT BELL, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in the manufacture of ornamental fabrics." *Letters Patent sealed.*
CLEGG. 31st December 1863.	3306. JOSEPH CLEGG, of High Crompton, near Oldham, in the County of Lancaster, Spinner and Manufacturer, for an invention for—"Certain improvements in the manufacture or weaving of piled fabrics." *Letters Patent sealed.*
DALE. CARO. 31st December 1863.	3307. JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, and HEINRICH CARO, of the same place, Chemist, for an invention for—"Improvements in obtaining colouring matters for dyeing and printing." *Letters Patent sealed.*
BYRNES. BENJAMIN. 31st December 1863.	3308. AUNGEIR BYRNES, of No. 4, Raven Terrace, Whitechapel Road, in the County of Middlesex, and HENRY BENJAMIN, of No. 20, St. Mary Axe, in the City of London, Gunmakers, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*
RADLEY. 31st December 1863.	3309. JAMES RADLEY, of Saint Helens, in the County of Lancaster, Coal Proprietor, for an invention for—"Improvements in mounting and serving guns used upon vessels and fortifications." *Letters Patent sealed.*

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